

CHELMSFORD  
RURAL DISTRICT COUNCIL.

---

**Annual Report**  
OF THE  
**MEDICAL OFFICER of HEALTH**  
(JOHN F. MACDONALD, M.D., D.P.H.)  
(Barrister-at-Law)  
FOR  
**— 1937. —**

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CHELMSFORD :  
PRINTED BY JOHN DUTTON LTD., 8, TINDAL STREET,  
AND 91, HIGH STREET.

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WATERLOO LANE,  
CHELMSFORD.

*31st May, 1938.*

*To the Chairman and Members of the Chelmsford Rural District Council.*

Mr. Chairman and Gentlemen,

I have the honour to present for your consideration the Annual Report on the Health and Sanitary circumstances of your district during the year 1937.

The Death-rate for the year per 1,000 population was 12.3 compared with 12.7 for 1936, and the Birth-rate was 15.4 against 14.9 for 1936.

The number of cases of infectious diseases was not above the average.

The piped water supply outlined in last year's report is nearing completion, and further extensions are under consideration.

To my colleagues I am much indebted for valuable assistance in the preparation of this Report.

For the sympathetic consideration and assistance received during the year, I beg to thank the Council.

I am,

Mr. Chairman and Gentlemen,

Your obedient Servant,

JOHN. F. MACDONALD.

## STAFF.

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### PUBLIC HEALTH DEPARTMENT.

*Medical Officer of Health* : John F. Macdonald, M.D., D.P.H., who is also Medical Officer of Health for the Rural Districts of Maldon and Rochford.

*Clerk to Medical Officer of Health* : M. C. Barton.

### SANITARY INSPECTOR'S DEPARTMENT.

*Chief Sanitary Inspector and Petroleum Inspector* : A. Denton Ogden, F.R.S.I. F.S.I.A., (Qualified Inspector of Meat and other Foods, Royal Sanitary Institute, late Investigator to the Industrial Fatigue Board (Medical Research Council).

*Second Sanitary Inspector* : G. F. Mellor, A.M.Inst.P.C., M.S.I.A., A.R.S.I. (Qualified Inspector of Meat and other Foods, Qualified Smoke Inspector, Royal Sanitary Institute).

*Assistant Sanitary Inspector* : T. H. C. Bartrop, A.R.S.I., M.S.I.A. (Qualified Inspector of Meat and other Foods, Royal Sanitary Institute).

*Clerk—Assistant* : J. V. Binder.

*Clerk* : F. B. W. Brewster.

### ENGINEER'S DEPARTMENT.

*Engineer, Surveyor and Housing Architect* : T. T. Thomas, M.Inst.M. & Cy.E.

*Assistant Engineer and Surveyor* : E. Ollett.

*Building Inspector* : C. F. Church.

*Surveyor's Assistant* : T. Archer.

*Clerical Staff* : A. R. Brookes.

R. V. Aldred.

## CHELMSFORD RURAL DISTRICT.

### STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

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Area (acres)	..	..	86,506 (land and inland waters).
Population (estimated), 1937	..		29,960
Population, 1931 (census)	..		27,836 (13,628 males ; 14,208 females).
Population, 1921 (census)	..		24,545
Number of inhabited houses (1931)	..	..	7,352
Number of families or separate occupiers (1931)	..		7,441
Number of houses on 31st December, 1937, according to the rate books	..	..	9,288
Number of occupied houses on 31st December, 1937, according to the rate books	..		9,000
Number of unoccupied houses on 31st December, 1937, according the rate books			288
(not including empty houses in respect of which Demolition Orders have been made by the Council).			

The rateable value of the district for the half-year commencing—  
1st April, 1937, was £152,669 (excluding agricultural lands and buildings, tithes, &c.)

1st October, 1937, was £154,489 (excluding agricultural lands and buildings, tithes, &c.)

The sum represented by a penny rate, year ended 31st  
March, 1937 .. .. .. £620



## SOCIAL CONDITIONS.

A large proportion of the adult population of the district is employed in the agricultural industry. A number residing in the parishes adjacent to the Borough of Chelmsford are employed in works in the Borough.

The number of unemployed persons was not excessive throughout the year.

## EXTRACTS FROM VITAL STATISTICS OF THE YEAR.

		Total. Male. Female.			
Live	{ Legitimate ..	443	224	219	} Birth-rate (R.G.) 15.4
Births	{ Illegitimate ..	17	7	10	
Still	{ Legitimate ..	11	6	5	} Rate per 1,000 births
Births	{ Illegitimate ..	1	1	—	
Deaths	.. ..	370	190	180	Death-rate (R.G.) 12.3*
Deaths from puerperal causes :—					
	From Puerperal Sepsis ..				Nil.
	Other Puerperal causes ..				Nil.
Number of deaths of infants under 1 year of age :—					
Males, 8 (— illegitimate) ; females, 9 (1 illegitimate).					
Death-rate of infants under 1 year of age :—					
	All infants per 1,000 live births ..				37.0
	Legitimate infants per 1,000 legitimate				
	live births .. .. .				36.1
	Illegitimate infants per 1,000 illegiti-				
	mate live births .. .. .				58.8
Deaths from Cancer (all ages)	.. ..				59
Deaths from Measles (all ages)	.. ..				2
Deaths from Whooping Cough (all ages)	.. ..				Nil.
Deaths from Diarrhoea (under 2 years of age)	.. ..				Nil.



COMPARATIVE TABLE OF BIRTH AND DEATH RATES DURING  
THE YEAR 1937.

	Rate per 1,000 Resident Population.		Deaths under one year per 1,000 regis- tered live births.
	Live Births.	Deaths from all causes.	
England and Wales .. ..	14.9	12.4	58
125 County Boroughs and great towns, including London ..	14.9	12.5	62
148 smaller towns with estimated resident population of from 25,000 to 50,000 .. ..	15.3	11.9	55
Chelmsford Rural District ..	15.4	12.3*	37

\*In order to render this figure comparable with the death rate for the country as a whole, it must be multiplied by the "Comparability Factor," 0.85, which has been supplied by the Registrar General as requisite to redress the abnormal constitution of the local population from the point of view of sex and age components. Applying this factor, the corrected death rate is 10.5 as compared with 12.4 for the country as a whole.

The deaths classified according to age were as follows :—

Age.	No. of Deaths.		
	Male.	Female.	Total.
Under 1 year .. ..	8 ..	8 ..	16
1 and under 2 .. ..	— ..	1 ..	1
2     ,,     5 .. ..	1 ..	1 ..	2
5     ,,     15 .. ..	4 ..	5 ..	9
15    ,,     25 .. ..	4 ..	8 ..	12
25    ,,     35 .. ..	2 ..	5 ..	7
35    ,,     45 .. ..	10 ..	6 ..	16
45    ,,     55 .. ..	9 ..	9 ..	18
55    ,,     65 .. ..	30 ..	18 ..	48
65    ,,     75 .. ..	53 ..	53 ..	106
75 and over .. ..	69 ..	66 ..	135
Totals .. ..	190 ..	180 ..	370

The following table classifies the deaths according to cause and sex :—

Cause of Death.	Males.	Females.	Total.
Typhoid and Paratyphoid Fevers ...	1	...	1
Measles ...	1	1	2
Scarlet Fever ...	...	...	...
Whooping Cough ...	...	...	...
Diphtheria ...	1	...	1
Influenza ...	2	3	5
Encephalitis Lethargica ...	...	...	...
Cerebro Spinal Fever ...	...	...	...
Tuberculosis of Respiratory System ...	5	8	13
Other Tuberculosis ...	3	3	6
Syphilis ...	1	2	3
General paralysis of the Insane, tabes dorsalis ...	2	...	2
Cancer, ...	29	30	59
Diabetes ...	1	4	5
Cerebral Hæmorrhage, &c. ...	12	9	21
Heart Disease... ..	41	38	79
Aneurysm ...	1	...	1
Other Circulatory Diseases ...	9	12	21
Bronchitis ...	9	7	16
Pneumonia (all forms) ...	7	8	15
Other Respiratory Diseases ...	3	1	4
Peptic Ulcer ...	2	...	2
Diarrhœa (under 2 years) ...	...	...	...
Appendicitis ...	3	...	3
Cirrhosis of Liver ...	1	...	1
Other Diseases of Liver ...	...	2	2
„ Digestive Diseases ...	5	4	9
Acute and Chronic Nephritis ...	1	2	3
Puerperal Sepsis ...	...	...	...
Other Puerperal Diseases ...	...	...	...
Congenital Debility and Malformation, Premature Birth ...	5	7	12
Senility ...	24	18	42
Suicide ...	3	1	4
Other Violence ...	7	7	14
*Other defined Diseases ...	11	12	23
Causes ill-defined or unknown ...	...	1	1
TOTALS	190	180	370

\* Includes 1 Male death, due to Leprosy and 1 Female death due to Poliomyelitis.

## GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

The Rural District Council consists of 34 elected members and meets monthly. There are several Committees dealing with Public Health matters, each of which meets on the 3rd Tuesday of each month. The Committees' reports are presented at the following Council Meeting—4th Tuesday in each month. The Minutes of the Council are printed and distributed to members.

## LIST OF COMMITTEES.

Finance and General Purposes.  
 Buildings, Works and Town Planning.  
 Public Health.  
 Drainage and Water Supply.  
 Housing.  
 Rating and Valuation.  
 Sanitary Services.  
 Fire Protection.

The Council is represented on the :—

Chelmsford Area Assessment Committee.  
 Chelmsford Joint Sewerage Committee.  
 Chelmsford Joint Hospital Board.  
 South-East Essex Superannuation Joint Committee.  
 South-East Essex United Districts (Medical Officer of Health)  
 Committee.  
 Chelmsford Area Guardians Committee.  
 Ministry of Labour Employment Committee.  
 Mid-Essex Regional Planning Committee.  
 Air Raid Precautions, Essex County Central Area (Chelmsford  
 Borough and Rural District) Committee.  
 Chelmsford and District Tuberculosis After Care Association.  
 Rural District Councils' Association (Essex Branch).

MIDWIVES. None is subsidised by the District Council.  
 There were 18 midwives practising in the district at the end of  
 1937.

## LABORATORY FACILITIES.

These services are provided at 91, Queen Victoria Street,  
 London, E.C.4., by Drs. Beale and Suckling, partly under the  
 Essex County Council scheme.

*Water Analysis.* During the year 31 samples (16 under the County Council scheme) were analysed.

The following bacteriological specimens were examined :—

Diphtheria	..	..	...	44
Sputa	..	..	..	52
Typhoid	..	..	..	—
General	..	..	..	9
Milk	..	..	..	—
Water	..	..	..	16
Total				121

In addition, 179 samples of milk were examined biologically for the Tubercle Bacillus. Of these samples, 162 proved negative, 12 proved positive and the results of 5 were inconclusive.

**Hospitals provided or subsidised by the Sanitary Authority or by the County Council :—**

(1) Tuberculosis Institutions are provided by the Essex County Council.

(2) Maternity Hospital. Hospital treatment is provided by the County Council by arrangement with certain hospitals for the following types of patients :—

- (i) Complicated or difficult cases of confinement where hospital treatment is essential.
- (ii) Cases of confinement where, in the opinion of the medical attendant, the patient cannot with safety be confined in her own home.
- (iii) Patients who, after confinement, are found to be suffering from Puerperal Pyrexia.
- (iv) Pregnant women for whom hospital treatment is necessary.

(3) Hospital for Children. Arrangements are made by the Essex County Council with certain hospitals for the reception of infants suffering from Ophthalmia Neonatorum, for children

suffering from minor ailments such as tonsils and adenoids, and those requiring orthopædic treatment as recommended by the Orthopædic Surgeon for such conditions as rickets, club foot, infantile paralysis, &c.

(4) Fever hospital accommodation is provided for both the Borough and the Rural District by the Chelmsford Joint Hospital Board. The Hospital for ordinary infectious diseases situated in Great Baddow consists of an administrative block, a 14-bed pavilion, a 7-bed pavilion, an 18-bed asbestos pavilion and the necessary out-houses (wash-house, laundry, disinfecter, mortuary, &c.)

(5) A Small-pox Hospital is provided by the Essex County Council. For this purpose the County Council has entered into an agreement with the Borough of Colchester for the provision of Hospital treatment, including ambulance services for small-pox cases.

(6) A General Hospital (Voluntary) situated in the Borough of Chelmsford serves the whole of the Rural District.

Beyond that provided by the Public Assistance Committee, there is no institutional provision for unmarried mothers, illegitimate infants and homeless children in the district.

REGISTERED NURSING HOMES. These are administered by the Essex County Council. There is none in the district.

AMBULANCE FACILITIES. (a) For infectious diseases there is a motor ambulance which is housed at the Isolation Hospital in Great Baddow

(b) For non-infectious and accident cases arrangements have been made with the St. John Ambulance Brigade (Chelmsford Division), for their ambulance to be available for cases in the Rural District. There is an agreement in force for the reciprocal use of ambulances throughout the County of Essex.

MORTUARIES. There is a mortuary for infectious cases at the Isolation Hospital, Great Baddow.



During the year, arrangements were made with the Chelmsford General Hospital for the housing of bodies from the District and the housing of bodies removed by order of a coroner.

CLINICS AND TREATMENT CENTRES. These are provided by the Essex County Council as given in the following tabular statement :—

MATEBNITY AND CHILD WELFARE CENTRES.

Centre.	Address.	Sessions (Monthly).
Broomfield ..	Church Room .. ..	1st Thursday, 2.30 p.m.
Galleywood ..	Primitive Methodist Chapel	2nd Monday, 2.30 p.m.
Writtle ..	Iron Room .. ..	4th Tuesday, 2.30 p.m.
Hanningfields ..	Women's Institute Hall, East Hanningfield	3rd Wednesday, 2.30 p.m.
Ingatestone ..	Workmen's Institute ..	4th Monday, 2.30 p.m.
Danbury ..	Village Hall .. ..	1st and 3rd Thursdays, 2.30 p.m.
Great Baddow ..	Reading Room .. ..	4th Thursday, 2.30 p.m.
Little Waltham	Drill Hall .. ..	1st Tuesday, 2.30 p.m.
Stock .. ..	Congregational Schoolroom ..	4th Wednesday, 2.30 p.m.
Woodham Ferrers	Smallholder's Hall, Hull-bridge Road, South Woodham	1st Wednesday, 2.30 p.m.
Boreham .. (Weighing)	Village Hall .. ..	2nd Thursday, 2.30 p.m.

ANTE-NATAL CLINIC.

Chelmsford & Essex Hospital, London Road, Chelmsford, 1st and 3rd Tuesdays, 2.15 p.m.

TUBERCULOSIS DISPENSARY.

Address:	Hours of Session:
Chelmsford & Essex Hospital, London Road, Chelmsford.	Fridays. 2—4 p.m.

VENEREAL DISEASES.

Treatment is available at the Chelmsford & Essex Hospital, London Road, Chelmsford.

## LEGISLATION IN FORCE.

The following are the special local Orders, Regulations and General Adoptive Acts in force in the district.

URBAN POWERS.—The Council has the following Urban Powers :—

*Conferred by the L.G.B., April 29th, 1876.  
Public Health Act, 1875.*

Section(s).	Subject.	Parish(es) to which powers apply.
277	.. Constitution of Great Baddow s.d.d.	.. Great Baddow.

*Conferred by the L.G.B., April 8th, 1880.  
(Came into operation 26th April, 1880).*

20	.. Plans of Sewers (Special Expenses)	} Great Baddow, Ingatestone and Fryerning, Springfield.
26 (1)	.. Building over Sewers	
44	.. " Cleansing " Bye-laws	.. The whole district.
45	.. Receptacles for rubbish	.. Writtle.
47 (2 & 3)	.. Nuisance on premises	.. Ingatestone and Fryerning and Springfield.
157 (2, 3 & 4)	Building Bye-laws	.. The whole district.
158	.. Building Bye-laws, contravention of	.. " "
169 (2 & 3),		
170	.. Slaughterhouses, regulation of	Great Baddow, Boreham, Broomfield, Buttsbury, Danbury, Good Easter, West



Section(s).	Subject.	Parish(es) to which powers apply. Hanningfield, Ingate- stone and Fryerning, Great Leighs, Pleshey, Roxwell, Stock, Great and Little Waltham, Widford, Woodham Ferrers, Writtle and Springfield.
-------------	----------	---

The above powers (Slaughterhouses) and Sections 29, 30, 31 of the Public Health Acts (Amendment) Act, 1890, came into operation for the whole district 5th June, 1922. (This was the first time these sections were made applicable to any parish in the district).

*Conferred by order of L.G.B., June 3rd, 1892.*

*(Came into operation 4th July, 1892).*

157 (1)	.. Bye-laws relating to width of streets	The whole district.
161 (1)	.. Lighting streets	.. Great Baddow s.p.a., Ingatestone and Fry- erning, Writtle (and Widford, 1909).

*Conferred by L.G.B., January 18th, 1894.*

*(Came into operation 19th February, 1894).*

112, 113, 114, 115	Offensive trades, regula- tion of (special expenses)	Great Baddow s.p.a., Broomfield, Ingate- stone and Fryerning, Great and Little Waltham, Writtle and Springfield.
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*Conferred February 28th, 1895.*

*(Came into operation 1st April, 1895).*

197	.. Provision of offices	.. The whole district.
-----	-------------------------	------------------------

*Conferred March 20th, 1896.*

*(Came into operation 20th April, 1896).*

Section(s).	Subject.	Parish(es) to which powers apply.
20	.. Map of Sewerage system (special expenses)	Writtle.
25	.. Building houses without drains (special expenses)	Great Baddow s.p.a., Ingatestone and Fry- erning, Springfield, Widford, Writtle.
26 (1)	.. Providing penalty for building over sewers (special expenses)	Writtle.
39	.. Providing public necessar- ies (special expenses)	Ingatestone and Fry- erning, Springfield, Writtle and Great Baddow s.p.a.
47 (2)	.. Stagnant water under houses (special expenses)	Great Baddow s.p.a., Broomfield, Stock, Great and Little Wal- tham, Writtle, Wid- ford.
47 (3)	.. Allowing cesspools, &c., to overflow (special expen- ses)	Great Baddow s.p.a., Broomfield, Stock, Great and Little Wal- tham, Writtle, Ingate- stone and Fryerning, Widford, Springfield.
160 (3)	.. Ruinous buildings (special expenses)	The whole district.

*Conferred July 9th, 1898.*

277	.. Constitution of Writtle s.p.a.	Writtle.
-----	--------------------------------------	----------

*Conferred January 26th, 1900.*

Section(s).	Subject.	Parish(es) to which powers apply
42	.. Removal of house refuse, &c.	Great Baddow s.p.a., Broomfield, Ingate- stone and Fryerning, Springfield, Little Wal- tham, Writtle s.p.a. (Great Waltham, March 8th, 1902, and Widford, 24th June, 1914).

*Conferred October 12th, 1905.**(Came into operation 30th October, 1905).*

26 (1)	.. Providing penalty for building over sewers (special expenses)	Writtle s.p.a.
--------	--	----------------

*Conferred August 23rd, 1907.**(Came into operation 16th September, 1907).*

161 (1)	.. Street Lighting (special expenses)	Margaretting. Widford (24th June, 1914).
---------	--	--

*Conferred 14th April, 1909.*

229, 230	.. Remuneration of Water Rate Collectors (special expenses)	Danbury, East Han- ningfield, Ingatestone and Fryerning, Little Baddow, Rettendon, Runwell, Sandon, Wid- ford, Woodham Ferrers, Great Baddow s.p.a., Writtle s.p.a.
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*Conferred 15th July, 1915.*

Section(s).	Subject.	Parish(es) to which powers apply
229, 230	.. Remuneration of Water Rate Collectors (special expenses)	Broomfield.

*Conferred 16th September, 1931.*

42	.. Removal of house refuse (special expenses)	Woodham Ferrers.
----	--	------------------

*Conferred 25th November, 1932.*

161	.. Street Lighting (special expenses)	Broomfield.
-----	--	-------------

*Conferred 23rd August, 1934.*

42	.. Removal of house refuse (special expenses)	Galleywood (Great Baddow, outside s.p.a.)
----	--	--

*Conferred 29th October, 1934.*

42	.. Removal of house refuse (special expenses)	Stock.
----	--	--------

*Conferred 28th November, 1934.*

161	.. Street Lighting (special expenses)	Galleywood (Great Baddow, outside s.p.a.)
-----	--	--

*Conferred 12th July, 1935.*

161	.. Street Lighting (special expenses)	Little Waltham.
-----	--	-----------------

*Conferred 14th March, 1936.*

161	.. Street Lighting (special expenses)	Mountnessing.
-----	--	---------------

*Conferred 3rd June, 1892.**Public Health Acts (Amendment) Act, 1890.*

Section(s).	Subject.	Parish(es) to which powers apply.
23 (so much as not already in force)	.. Relating to Bye-laws as to (1) water closets, (2) structure of floors and height of rooms, (3) pav- ing of yards, (4) Secon- dary means of access for removal of house refuse.	Whole district (came into operation 4th July, 1892).

*Adoptive Acts.*

Infectious Disease (Notification) Act, 1889	Came into operation 1st January 1890.
Infectious Disease (Prevention) Act, 1890	Came in force April 1st, 1891.
Public Health Acts (Amend- ment) Act, 1890 (Part III., clauses applicable to rural dis- tricts, <i>i.e.</i> , sections made ap- plicable by resolution of a Rural District Council with- out the necessity of a special order of the Ministry of Health).	Came in force April 1st, 1891, for the whole district.

*Conferred 17th June, 1912.**(Came into operation 29th July, 1912).*

Public Health Acts Amendment Act, 1907.	For the whole district.
Relating to Streets and Build- ings	Secs. 15, 16, 20, 22, 23, 24, 27, 29, 30, 31, 32 and 33 in Part II.
Sanitary provisions .. ..	Secs. 34, 35, 36, 37, 38, 43, 44, 45, 46, 48, 49 in Part III.

Public Health Acts Amendment  
Act, 1907.

For the whole district.

Infectious Diseases . . . . Secs. 52, 53, 54, 55, 56, 57, 58,  
59, 60, 62, 63, 64, 65, 67 in  
Part IV.

For Great Baddow s.p.a., Ingatestone and  
Fryerning, Widford and Writtle s.p.a.

Sanitary provisions . . . . Secs. 39, 40, 41 and 42 in  
Part III.

*Bye-laws and Regulations adopted.*

1. Relating to New Streets and Buildings Apply to whole district. Adopted 1929, the older 1914 series being repealed.
2. Relating to the Regulation of Galleywood Common Adopted 16th September, 1924.

NOTE.—As the result of the Essex Review Order, 1934, bye-laws adopted before 1924 are no longer in force.

**WATER SUPPLY.**

At the end of the year, the Scheme outlined by the Council in 1933, designed to provide a piped water supply throughout the District, was nearing completion.

The routes along which the mains were to be laid under this Scheme have been described in previous Annual Reports.

The cost of the whole Scheme will be approximately £120,000, of which sum nearly £100,000 will be borne by the local rates.

Prior to this Scheme, there were 67 miles, 787 yards of water-mains in the District and on completion of the Scheme the Council will have 160 miles, 1,469 yards of watermains under their control. This is exclusive of the mains in Mountnessing and part of South Hanningfield which are in the statutory area of the Southend Waterworks Company.

Small extensions to existing supplies, totalling 3 miles, 682 yards, have been executed during 1937. Details of these extensions are given on the following pages.



*Watermain Extensions.*

				Length of mains in yards.	Size of mains in inches.
Great Baddow—					
Loftin Way	..	..	..	96	3
Dorset Avenue	..	..	..	72	4
Loftin Way	..	..	..	148	3
New Housing Estate, West Hanning-					
field Road	..	..	..	300	3
„ „ „			..	462	4
Winchelsea Avenue	..	..	..	192	3
Brook Lane, Galleywood	..	..	..	200	4
Little Baddow—					
Fir Tree Lane	..	..	..	32	3
Broomfield—					
Erick Avenue	..	..	..	12	4
Road off Erick Avenue	..	..	..	96	3
Boreham—					
Elm Way	..	..	..	72	3
Danbury—					
Mill Lane	..	..	..	36	3
„ „	..	..	..	212	3
Gay Bowers	..	..	..	1312	4
Bell Lane	..	..	..	4	3
„ „	..	..	..	248	4
Road past Brockhams, Runsell Green				32	4
„ „ „ „ „			..	300	4
Ingatestone and Fryerning—					
Back of Post Office	..	..	..	24	3
Housing Estate	..	..	..	104	4
„ „	..	..	..	340	3
Margaretting—					
Red Lion P.H. Road Crossing	..	..	..	20	3
Carried forward				4,314	



			Length of mains in yards.	Size of mains in inches.
	Brought forward	..	4,314	
Runwell—				
Linden Road ..	..	..	212	3
Sandon—				
Southend Road ..	..	..	144	4
Springfield—				
New Estate Road, Fordsons Estate ..	..	..	208	3
Stock—				
Mill Lane ..	..	..	212	4
Little Waltham—				
Merefields Estate ..	..	..	432	3
Writtle—				
New Road, Town End ..	..	..	176	3
Lordships Lane ..	..	..	232	5
Paradise Road ..	..	..	32	3
			5,962	= 3 miles 682 yards

*Watermain Renewals.*

			Length of mains in yards.	Size of mains in inches.
Sandon—				
Gingerbread Bridge ..	..	..	32	8
Danbury—				
Near The Avenue ..	..	..	80	4
Woodham Ferrers—				
Fen Road ..	..	..	12	3
" " ..	..	..	448	5
			572	

During the year, 161,689,800 gallons of water were supplied throughout the district (excluding that supplied to Mountnessing and South Hanningfield by the Southend Waterworks Company).

The following table shows the quantity of water supplied in the district :—

WATER CONSUMPTION (IN GALLONS) DURING 1937.

	Council's Waterworks.	South Essex Waterworks Company.	Southend Waterworks Company.	Total.
Great Baddow Area	—	41,795,000	—	41,795,000
Broomfield Area ..	9,983,000	—	—	9,983,000
Danbury Area ..	—	65,999,000	1,512,000	67,511,000
South Hanningfield Area	—	—	3,999,000	3,999,000
Ingatstone, Margaretting, Writtle and West Hanningfield	9,934,800	26,158,000	—	36,092,800
Mountnessing Area	—	—	2,092,000	2,092,000
Northern Area ..	—	*4,038,000	—	4,038,000
Stock Area .. ..	—	2,270,000	—	2,270,000
	19,917,800	140,260,000	7,603,000	167,780,800

\* A proportion of this amount has been used for flushing and testing during construction.

From the above tabular statement it will be seen that of the water supplied by the Council, 140,260,000 gallons were purchased from the South Essex Waterworks Company, the only areas supplied from local waterworks being Broomfield and parts of Ingatstone and Fryerning.

The number of additional properties connected to the water mains during the year is shown in the following table and the total properties now served with main water are set out according to parish in the table on page 45.



With the exception of Broomfield and the statutory area supplied by the Southend Waterworks Company, all the piped water supply of the District will ultimately be taken from the South Essex Waterworks Company.

This Company's water is from the Stour Valley and before being put into supply it is subjected to the "Chloramine treatment giving a ratio of two to one, *i.e.*, two parts of Chlorine to one part of Ammonia and the actual dosage is 0.25 parts per million Chlorine and 0.12 parts Ammonia." The supply is controlled by chemical and bacteriological examinations and the Company states—"These analyses are done weekly and since we started the Works here have given no *B. Coli* in a 100 c.c. during this period."

A copy of a recent analysis is shown on pages 25 and 26.

Part of the District is supplied by the Southend Waterworks Company and the following are the particulars given by the Secretary of that Company :—

"The Parish of Mountnessing and part of the Parish of South Hanningfield are included in the Statutory Area of the Southend Waterworks Company. The former district is supplied with deep well water and the latter with water drawn from the Company's Works at Langford augmented with a supply from deep well sources. The deep well water goes into supply untreated but the water drawn from the Company's Works at Langford is treated before being pumped into the mains.

An excess lime plant is installed at Langford, where waters from the Rivers Chelmer, Ter and Blackwater are treated, the following procedure being adopted :—

After being stored for ten days the water is pumped to the Purification Works where it is divided in the ratio of 1 : 6. The smaller portion is mixed with lime to produce sufficient lime water to give an excess of 2 grains of lime per gallon when united with the larger portion, which has meanwhile been treated with alumina. The whole of the water then enters the Mixing Tanks where it is thoroughly agitated and from there it passes to Dortmund or Settling Tanks, where a very heavy and flocculent precipitate settles out. The water then flows to the

Contact Tanks where there is close contact between the water and lime for a period of 22 hours or so. The water then passes to the Carbonating Chamber where Carbon Dioxide derived from coke is forced into the water in order to precipitate the excess lime and partially re-dissolve it.

The water is also dosed with ground activated carbon to remove any taste or odour and to improve the palatability of the treated product.

Finally, and to complete the treatment the water is passed through Rapid Gravity Quartz sand filters.

In addition to this thorough treatment, a Chlorinating Plant is also available should it at any time be thought desirable to take exceptional precautions.

The Company has on its Staff a fully qualified Chemist and Bacteriologist with Staff and Laboratory at Langford, and a daily sample for complete analysis is taken prior to the treated water leaving for distribution. A weekly sample is also taken for complete analysis from varying points in the Area and from the wells already referred to.

An eminent firm of consulting chemists carry out a quarterly inspection of the Langford Works and take occasional samples in the Company's Area of Supply for chemical and bacteriological examinations. The results obtained throughout 1937 have been up to the usual high standard."

A copy of an analysis is shown on page 27.

The reports of the analyses of samples from the deep boreholes at Ingatestone and Broomfield are set out on pages 28 and 29.

Arrangements have been made for a quarterly analysis from these sources to be undertaken.

When and where the main supply is available, village pumps are discontinued. Copies of analyses of samples from three such pumps are given on pages 30 and 33.

*From the South Essex Waterworks Company.*

Labelled Tap on Delivery Main. Herongate Pumping Station.

Chemical Results in parts per 100,000.

Appearance	..	.. Bright ; particles of mineral debris.
------------	----	--



## Chemical Results in parts per 100,000.

Colour	..	..	Slight yellow ; Odour, Nil.
Reaction pH.	..	..	Neutral, 7.9 ; Free Carbonic Acid —.
Electric Conductivity at 20° C.	640		
Total Solids, 180° C.	..	42.5	
Chlorine in Chlorides	..	2.9	
Nitrogen in Nitrates	..	0.32, Nitrites Absent.	
Hardness : Permanent	..	7.5	
Temporary	..	22.5	
Total	..	30.0	
Metals ..	..	..	Iron : 0.04
Free Ammonia	..	..	0.0016, Ammoniacal Nitrogen—.
Albuminoid Ammonia	..	0.0120, Albuminoid Nitrogen—.	
Oxygen absorbed in 4 hours at 80° F.	..	..	0.140

## Bacteriological Results.

No. of Bacteria per c.c. or ml.—

On Agar in 3 days at 20° C.	9
„ „ 1 day at 37° C.	7
„ „ 2 days at 37° C.	8

The Bacillus Coli	..	..	Present in —. Absent in 100 c.c.
Bacillus Welchii	..	..	Present in —. Absent in 100 c.c.
(B. Enteriditis Sporogenes)			

*Report* : This sample is reasonably clear and bright, and neutral in reaction. The water contains no excess of saline or mineral matter in solution, is free from metals apart from a small trace of iron, of satisfactory organic quality, and of a high degree of bacterial purity. We regard it as pure and wholesome water suitable for the purposes of a public supply.

(Signed) E. V. SUCKLING.

For Drs. Beale and Suckling.

*From The Southend Waterworks Company's Mains.*

Chemical Results in parts per 100,000.

Turbidity	..	..	Clear and Bright.
Colour	..	..	Normal.
Odour ..	..	..	Nil.
Reaction pH.	..	..	Neutral 7.2.
Free Carbonic Acid	..	..	—.
Electric Conductivity at 20° C.	410		
Total Solids, 180° C.	..	27.5	
Chlorine in Chlorides	..	3.5	
Nitrogen in Nitrates	..	0.60	
Nitrites	..	..	Absent.
Hardness : Permanent	..	12.0	
Temporary	..	0.5	
Total ..	..	12.5	
Metals ..	..	..	Absent.
Free Ammonia	..	0.0046	
Albuminoid Ammonia	..	0.0092	
Oxygen absorbed in 4 hours at 80° F.	..	0.110	

## Bacteriological Results.

No. of Bacteria per c.c.—

On Agar in 3 days at 20° C. 27

,, ,, 24 hours at 37° C. 5

The Bacillus Coli .. .. Present in —. Absent in 100 c.c.

Bacillus Welchii .. .. Present in —. Absent in 100 c.c.

(B. Enteritidis Sporogenes)

*Report* : “ This is a clear and bright water, of normal colour, neutral reaction and of moderate hardness. The water contains no excess of saline matter, is free from metals and of a satisfactory degree of organic quality. Bacteriologically it is of the highest degree of purity. It is a pure and wholesome water, suitable for drinking and domestic purposes.”

(Signed) JOHN F. BEALE.

For Drs. Beale and Suckling.



*From Borehole at Broomfield Pumping Station.*

Chemical Results in parts per 100,000.

Appearance	..	..	Clear and Bright.
Colour	..	..	Normal ; Odour, Nil.
Reaction pH.	..	..	Neutral, 8.1 ; Free Carbonic Acid —.
Electric Conductivity at 20° C.	1525		
Total Solids, 180° C.	..	101.5	
Chlorine in Chlorides	..	30.8	
Nitrogen in Nitrates	..	Nil ;	Nitrites absent.
Hardness : Permanent	..	0.0	
Temporary	..	2.0	
Total	..	2.0	
Metals	..	Iron : 0.01	
Free Ammonia	..	0.0440	Ammoniacal Nitrogen—.
Albuminoid Ammonia	..	0.0048	Albuminoid Nitrogen—.
Oxygen absorbed in 4 hours at 80° F.	..	0.040	

## Bacteriological Results.

No. of Bacteria per c.c. or ml.—	
On Agar in 3 days at 20° C.	—
„ „ 1 day at 37° C.	4
„ „ 2 days at 37° C.	90
The Bacillus Coli ..	.. Present in —. Absent in 50 c.c.
Bacillus Welchii ..	.. Present in —. Absent in —.
(B. Enteriditis Sporogenes)	

*Report :* “ This is a clear and bright water, of normal colour and of neutral reaction. The water contains no excess of saline matter, is very soft, contains only a negligible trace of iron and is of a satisfactory degree of organic and bacterial quality.

It is a pure and wholesome water, suitable for purposes of public supply.”

(Signed) JOHN F. BEALE,  
For Drs. Beale and Suckling.

*From Tap in dwellinghouse. Ingatestone Pumping Station.*

Chemical Results in parts per 100,000.

Appearance	..	..	Clear and Bright.
Colour ..	..	..	Normal ; Odour, Nil.
Reaction pH.	..	..	Neutral, 8.1 ; Free Carbonic Acid —.
Electric Conductivity at 20° C.	1220		
Total Solids, 180° C.	..	81.0	
Chlorine in Chlorides	..	22.2	
Nitrogen in Nitrates	..	Nil ;	Nitrites absent.
Hardness : Permanent	..	0.0, Alkalinity as CaCO <sub>3</sub> :	27.5
Temporary	..	1.5	
Total ..	..	1.5	
Metals	..	Iron :	0.02
Free Ammonia	..	0.0008, Ammoniacal Nitrogen—.	
Albuminoid Ammonia	..	0.0010, Albuminoid Nitrogen—.	
Oxygen absorbed in 4 hours at 80° F.	..	0.025	

## Bacteriological Results.

No. of Bacteria per c.c. or ml.—

On Agar in 3 days at 20° C.

—

,, ,, 1 day at 37° C.

10

,, ,, 2 days at 37° C.

48

The Bacillus Coli .. .. Present in —. Absent in 50 c.c.

Bacillus Welchii .. .. Present in —. Absent in —.

(B. Enteriditis Sporogenes)

*Report* : “ This is a clear and bright water, of normal colour and of neutral reaction. The water contains no excess of saline matter, is very soft, contains only a negligible trace of iron, and is of a satisfactory degree of organic and bacterial purity.

It is a pure and wholesome water, suitable for drinking and domestic purposes.”

(Signed) JOHN F. BEALE.

For Drs. Beale and Suckling.

*From Public Pump from Well, Sandon Village*

Chemical Results in parts per 100,000.

Appearance	..	..	Bright, slight vegetable and mineral deposit.
Colour	..	..	Normal ; Odour, None.
Reaction pH.	..	..	Neutral, 6.8 ; Free Carbonic Acid —.

Electric Conductivity at 20° C.	490	
Total Solids, 180° C.	..	33.0
Chlorine in Chlorides	..	2.9
Nitrogen in Nitrates	..	0.80,
		Nitrites absent.
Hardness : Permanent	..	13.5
Temporary	..	7.5
Total	..	21.0
Metals ..	..	Iron : 0.01
Free Ammonia	..	0.0012
Albuminoid Ammonia	..	0.0018
Oxygen absorbed in 4 hours at 80° F.	..	0.0350

## Bacteriological Results.

No. of Bacteria per c.c. or ml.—	
On Agar in 1 day at 37°C.	38
„ „ 2 days at 37° C.	90
The Bacillus Coli ..	.. Present in 1 c.c. Absent in 0.1 c.c.
Bacillus Welchii ..	.. Present in —. Absent in —.
(B. Enteriditis Sporogenes)	

*Report* : “ This is a bright water, containing particles of vegetable and mineral matter in suspension. It is of normal colour, neutral reaction and hard in character, though not unduly so. The water is free from excess of saline or metallic matter, is of satisfactory organic quality and shews no chemical evidence of undesirable contamination.

Bacteriologically, however, it is impure since the Bacillus Coli, an excretal organism, is present in 1 c.c. and in this respect the water is unfit for drinking and domestic purposes.”

(Signed) E. V. SUCKLING.

For Drs. Beale and Suckling.

*From Public Pump, Cock Lane, Highwood, Writtle.*

## Chemical Results in parts per 100,000.

Appearance	..	..	Opalescence, flocculent, brown deposit of iron oxides and vegetable particles.
Colour	..	..	Normal, settled ; Odour, Nil.
Reaction pH.	..	..	Neutral 7.2 ; Free Carbonic Acid —.
Electric Conductivity at 20° C.	1920		
Total Solids, 180° C.	..	128.0	
Chlorine in Chlorides	..	17.6	
Nitrogen in Nitrates	..	Nil ;	Nitrites absent.
Hardness : Permanent	..	39.5	
Temporary	..	50.5	
Total	..	90.0	
Metals ..	..	Iron : 0.10	
Free Ammonia	..	0.0004, Ammoniacal	Nitrogen —.
Albuminoid Ammonia	..	0.0060 Albuminoid	Nitrogen —.
Oxygen absorbed in 4 hours at 80° F.	..	0.065	

## Bacteriological Results.

No. of Bacteria per c.c. or ml.—		
On Agar in 3 days at 20° C.		—
„ „ 1 day at 37° C.		1
„ „ 2 days at 37° C.		12
The Bacillus Coli ..	..	Present in 50 c.c. Absent in 20 c.c.
Bacillus Welchii ..	..	Present in —. Present in —.
(B. Enteriditis Sporogenes)		

*Report :* “ This is an opalescent water, containing a deposit of iron oxides and mineral particles. It is of normal colour, neutral reaction and excessively hard, the hardness being such as to render the water unsuitable for general domestic use, although it cannot be certified actually as unwholesome in this respect.

It contains no excess of saline matter, has an appreciable trace of iron which renders the water unsightly in appearance, and is of a satisfactory degree of organic and bacterial quality.

As judged by this sample it is a wholesome water, but a better source of supply is desirable if such is available."

(Signed) JOHN F. BEALE.

For Drs. Beale and Suckling.

*From Well, Workhouse Lane, Stock.*

Chemical Results in parts per 100,000		
Appearance	..	.. Slight opalescence and deposit of vegetable and mineral debris.
Colour	..	.. V. Ft. yellow ; Odour, Nil.
Reaction pH.	..	.. Ft. acid, 6.4 ; Free Carbonic Acid 5.3.
Electric Conductivity at 20° C.	1335	
Total Solids, 180° C.	..	89.0
Chlorine in Chlorides	..	14.0
Nitrogen in Nitrates	..	4.2, Nitrites absent.
Hardness : Permanent		29.0
Temporary	..	6.0
Total	..	35.0
Metals	..	.. Iron : 0.01, Trace of Zinc.
Free Ammonia	..	.. 0.0024, Ammoniacal Nitrogen —.
Albuminoid Ammonia	..	0.0230, Albuminoid Nitrogen —.
Oxygen absorbed in 4 hours at 80° F.	..	.. 0.260

#### Bacteriological Results.

No. of Bacteria per c.c. or ml.—	
On Agar in 3 days at 20° C.	—
„ „ 1 day at 37° C.	30
„ „ 2 days at 37° C.	96
The Bacillus Coli	.. Present in 1.0 c.c. Absent in 0.1 c.c.
Bacillus Welchii	.. Present in —. Absent in —.
(B. Enteridis Sporogenes)	



*Report* : “ This sample has slight colour, opalescence and deposit. The water is very hard in character, although not to an excessive degree, contains no excess of salinity or metals, but is organically and bacteriologically impure and shows evidence of of pollution by matter of sewage or manurial origin.

The water is, therefore, considered unsuitable for drinking and domestic purposes. ”

(Signed) E. V. SUCKLING.

For Drs. Beale and Suckling.

### **RIVERS AND STREAMS.**

The district is drained by the Chelmer and its tributaries. Pollution from agricultural lands is bound to occur.

### **DRAINAGE AND SEWERAGE.**

During the year the Runwell Sewerage Scheme was completed at a cost of £19,616 15s. 10d., towards which the Runwell Hospital Authorities contributed £5,380, in addition to £20 a year towards the cost of chlorination of the effluent.

The Scheme consists of a 7in. sewer constructed from Brockhill House, near Moorgarden Wood, to Churchend Corner, where it was divided, one section being laid along Egbert Gardens and connected to a branch sewer from Ethelred Gardens and continued as a 9in. sewer until it met the other branch from Churchend Corner and Lynfords Farm, near St. Mary's Church, from whence it was continued as a 12in. sewer to the Pumping Station on the bank of the River Crouch. From here the sewage is pumped along a 9in. main sewer made to link up with the 9in. sewer from the Mental Hospital, near Southlands Farm and continued again through a 12in. main sewer to the Purification Works close to where the London & North Eastern Railway cross the River Crouch.

During the year the District Council instructed Mr. W. E. Blizard, of Messrs. Lemon & Blizard, Consulting Engineers, to

prepare a report, including estimates for the provision of sewerage schemes for a number of parishes. These reports will, in due course, be considered by the Council.

The number of properties at present provided with main drainage is shown in the table on page 45, classified according to parish.

### **CLOSET ACCOMMODATION.**

The following table shows the approximate number of sanitary conveniences of the various types in the district at the end of the year :—

Number of water closets (a small proportion of which are hand flushed)	..	..	..	4,022
Number of pail closets (a small proportion of which have an arrangement for distributing dry earth) and chemical closets	..	..	..	5,186
Number of privies	..	..	..	59

### **PUBLIC CLEANSING.**

In the 1936 Report the Chief Sanitary Inspector (Mr. A. Denton Ogden) prepared a Special Report on the Public Cleansing Service.

The conditions obtaining during the year were materially the same, although the work continues to increase with the increase in building operations.

During the year it was necessary to discontinue garaging the Freighter in the Bell Inn Yard, Chelmsford, owing to the buildings there being scheduled for demolition. These premises were not satisfactory, inasmuch as there was no proper accommodation for carrying out minor mechanical repairs, &c. A brick built workshop on land adjoining the Carpenter's Arms, Great Baddow, was acquired as a Public Cleansing Depot and has been altered to accommodate two vehicles. A workmen's mess room with a sink, stove and lockers is now provided under the same roof, as well as lavatory accommodation in the form of an Elsan closet. The



garage is also provided with a bench and suitable spacing, and a concrete approach in front of the building can be used as a washing space for the Freighter.

Main water and electric light is laid on to the Depot, but owing to the building being below the level of the sewer in Baddow Road, it has not been possible to connect it to the sewer.

ESTIMATE OF EXPENDITURE FOR YEAR ENDING 31ST MARCH,  
1939. £

Wages, Insurance and Superannuation	..	..	800
Hire of Freighter, licence and insurances	..	..	122
Petrol, oil and sundries	..	..	150
Rent of garage	..	..	19
Maintenance of Roads, &c., to Refuse Dumps	..	..	15
Maintenance and hire of horses	..	..	26
Hire of other transport	..	..	—
Carts and implements	..	..	12
Contractors	..	..	296
Other expenses	..	..	20
			<hr/>
			£1,460
			<hr/>

*Allocated to Parishes as follows :—*

Great Baddow s.p.a.	..	..	..	331
Great Baddow outside s.p.a.	..	..	..	96
Boreham	..	..	..	26
Broomfield	..	..	..	149
Ingatestone and Fryerning	..	..	..	247
Mountnessing	..	..	..	87
Rettendon	..	..	..	59
Stock	..	..	..	63
Great Waltham	..	..	..	58
Little Waltham	..	..	..	39
Woodham Ferrers	..	..	..	49
Writtle s.p.a.	..	..	..	256
			<hr/>	
			£1,460	
			<hr/>	

## SANITARY INSPECTION OF THE AREA.

During 1937 (as a result of notices served by the Chief Sanitary Inspector) 46 new galvanised iron ashbins were provided.

The table on page 39, prepared by the Chief Sanitary Inspector, shows the amount of inspection work performed by the Inspectors.

SLAUGHTERHOUSES. These are dealt with under the heading " Inspection and Supervision of Food " on pages 52-54.

KNACKERS YARDS. There is one in the district, in the Parish of Great Baddow. This is a modern building erected during 1935.

DAIRIES AND COWSHEDS. These are dealt with under the heading " Inspection and Supervision of Food " on pages 50-52.

SCHOOLS. The sanitary condition and water supply in connection with each school in the district were given in the Survey Report of 1935.

SMOKE ABATEMENT. No complaints were received during the year.

## INDEX OF WORK—YEAR 1937.

The following tables show the work done as a result of the service of Informal and Statutory Notices. The limewashing of cowsheds is not included :—

	1936.	1937
Adequate lighting provided to living rooms ..	6	2
Adequate ventilation provided to rooms ..	4	—
Ashbins provided .. ..	39	46
Brick walls repaired or roughcast ..	32	31
Chimney stacks repaired or re-pointed ..	16	24
Ceiling plasters repaired or renewed ..	49	64
Coppers repaired or provided ..	9	13
Damp-proof courses provided or repaired ..	11	8
Dampness remedied other than by d.p.c. ..	24	16
Dirty or verminous houses cleansed ..	5	1
Doors repaired or renewed ..	37	44

	1936.	1937.
Eavesgutters and downspouts repaired or renewed	30	43
External wall plaster repaired or renewed ..	24	13
Floors repaired or re-laid .. ..	79	80
Foodstores provided or repaired .. ..	2	1
Handrails provided to staircases .. ..	32	20
Internal wall plaster repaired or renewed ..	55	99
Lighting or ventilation provided to foodstores	1	—
Other types of walls repaired or renewed ..	7	9
Outbuildings repaired or demolished ..	4	11
Roofs repaired or renewed .. ..	55	44
Sinks provided or repaired .. ..	19	16
Staircases provided or repaired .. ..	22	17
Stoves repaired or renewed .. ..	10	19
Weatherboarded walls renewed or repaired ..	16	21
Windows or frames repaired or renewed ..	77	105
Yards or paths repaired or paved ..	45	29
Cesspools cleansed .. ..	11	10
Cesspools filled in or abolished .. ..	—	3
Cesspools provided .. ..	1	1
Cesspools repaired .. ..	6	3
Choked drains unstopped .. ..	5	10
Closet accommodation provided .. ..	4	24
Concrete floors laid to closets .. ..	6	25
Drainage systems altered or repaired ..	25	28
Foul ditches cleansed .. ..	8	30
Houses connected to the sewer .. ..	12	45
Overflows from cesspools abolished ..	11	14
Pail closet structures repaired or renewed ..	25	42
Pails provided to closets .. ..	6	23
Pail closets converted to water closets ..	—	49
Privies converted to water closets .. ..	—	1
Privies converted to pail closets .. ..	—	21
Water closet flushing apparatus repaired or renewed .. ..	4	10
Water closet pedestals repaired or renewed ..	—	1
Water closet structures repaired or renewed ..	6	15

	1936.	1937.
Urinals repaired or provided .. ..	1	1
Ventilation pipes fitted .. ..	3	1
Yard gullies provided or repaired .. ..	3	2
Main water supply provided to houses .. ..	6	4
Wells cleansed, repaired or improved .. ..	2	2
Approaches to cowsheds or dairies improved .. ..	13	6
Buildings converted to cowsheds .. ..	1	—
Cowshed floors repaired .. ..	14	14
Cowsheds reconstructed .. ..	5	3
Cowshed walls repaired .. ..	17	10
Cesspools provided .. ..	4	1
Dairies sealed off from cowsheds .. ..	—	3
Dairies sealed off from other buildings .. ..	2	1
Dairies repaired or improved .. ..	10	11
Dairy floors repaired .. ..	8	2
Drainage to cowshed or dairy improved .. ..	9	14
Lighting to cowshed or dairy improved .. ..	21	11
Manure accumulations removed .. ..	7	9
Mechanical milking plants, sterilizers, &c., provided .. ..	5	6
Other improvements to cowsheds or dairies .. ..	18	16
Ventilation to cowsheds or dairies .. ..	5	2
Water supply provided to cowsheds or dairies..	4	2
Bakehouses cleansed or limewashed .. ..	—	2
Miscellaneous work done .. ..	35	58
Rats and mice nuisances abated .. ..	5	10
Slaughterhouses cleansed or limewashed .. ..	3	—
Overcrowding abated .. ..	3	—
Non-compliance with Section 62 Housing Act, 1936 .. ..		5

### SHOPS.

Particulars of action taken during the year under the provisions of the Shops Act, 1934, are included in the table headed "Inspections and Particulars of Notices for the Year 1937," on the following page :—

# INSPECTIONS AND PARTICULARS OF NOTICES FOR THE YEAR 1937.

Nature of Inspection.	Total Inspec- tions.	Notices Out- stand- ing at end of 1936.	Notices served.		Notices	
			Informal.	Statutory.	Complied with.	Out-stand- ing at end of 1937.
Infectious Diseases Inquiries ..	96	—	—	—	—	—
Disinfection ..	23	—	—	—	—	—
Houses Inspected and Recorded under Housing Acts ..	51	—	—	—	—	—
Do. under Public Health Acts ..	58	66	53	17	76	60
Re-inspections under Housing Acts ..	391	—	—	—	—	—
Re-inspections under Public Health Acts ..	393	—	—	—	—	—
Overcrowding ..	145	—	16	—	5	11
Dirty condition of Houses ..	5	—	—	—	—	—
Other Nuisances ..	50	—	—	—	—	—
Re-inspections ..	50	—	—	—	—	—
Privies and Pail Closets ..	105	34	14	30	65	13
Water Closets ..	38	24	5	8	27	10
Urinals ..	18	—	1	—	—	1
House Drainage ..	996	25	234	15	143	131
Water Supply ..	168	3	6	13	7	15
Pigstyes ..	20	—	5	1	1	5
Animals improperly kept ..	—	—	—	—	—	—
Schools ..	13	—	2	—	1	1
Milkshops ..	15	—	2	—	2	—
Cowsheds and Dairies ..	421	30	71	5	53	53
Bakehouses ..	59	5	15	—	13	7
Ice-cream Premises ..	32	—	15	—	15	—
Slaughterhouses and Meatshops ..	1,337	—	2	—	2	—
Knackers Yards ..	7	—	—	—	—	—
Fresh and Fried Fishshops ..	2	—	—	—	—	—
Hairdressing and Barbers' Premises ..	—	—	—	—	—	—
Factories and Workshops ..	69	—	—	—	—	—
Rats, Mice and Insects Pests ..	46	4	10	—	11	3
Tents, Vans, Sheds ..	137	—	—	—	—	—
Public Cleansing :—						
Ashbins ..	44	7	42	2	46	5
Refuse Dumps ..	345	—	—	—	—	—
Shops Act ..	69	2	—	1	1	2
Miscellaneous ..	204	—	46	1	28	19
<b>Total ..</b>	<b>5,407</b>	<b>200</b>	<b>539</b>	<b>93</b>	<b>496</b>	<b>336</b>

## SWIMMING BATHS AND POOLS.

There are two privately owned swimming pools within the district which are open to the public.

SWIMMING POOL, THE CHASE, INGATESTONE. This swimming pool, which is owned by The Chase, Ltd., was constructed about five years ago.



The swimming pool, cafe, and adjoining buildings are of reinforced concrete.

Dressing cubicles for bathers are constructed in woodwork.

Water is taken from the main supply and when full the pool contains 125,000 gallons of water, the size of the pool being 100ft. by 35ft., with a depth varying from 4ft. to 7ft. 9ins.

A Bells Filtration Plant with ozone-air sterilization has been installed and the water is changed at the rate of approximately 10,000 gallons per hour.

The above system supercedes a system of cleansing the water by chlorination.

Sanitary accommodation is provided for both sexes.

MAY-PHILL ROADHOUSE, BATTLESBRIDGE. The swimming pool, which is owned by Mr. P. H. Evans, adjoins the Roadhouse which is situated about 250 yards from the Chelmsford-Southend Road on the bank of the River Crouch.

The size of the pool is 175ft. by 45ft. 6ins. with a depth varying from 3ft. to 8ft. 6ins. and its capacity is 312,000 gallons.

Owing to the unsatisfactory condition of the water, the owner was approached during 1935 and advised to adopt measures which would ensure a pure supply of water to the pool.

A purification plant has been installed, capable of purifying all the water in the pool in 8 hours—at the rate of 39,000 gallons per hour—by chlorination.

The following is a copy of an analysis of a sample taken from this Pool after being filled but prior to its being used;—

*From Swimming Pool; supplied from adjoining River Crouch (Tidal).*

Chemical Results in parts per 100,000.

Appearance	..	.. Bright; few particles of debris.
Colour	..	.. Normal; Odour, slight earthy.
Reaction pH.	..	.. Faint Alkaline: 8.3;

Free Carbonic Acid —.

Electric Conductivity at 20°C. —

Total Solids, 180°C. .. --



Chlorine in Chlorides	..	1520.0 ; Alkalinity as Calcium Carbonate —.
Nitrogen in Nitrates	..	0.16 ; Nitrites, very minute trace.
Hardness : Permanent	..	—
Temporary	..	—
Total	..	—
Metals ..	..	Absent.
Free Ammonia ..	..	0.0072
Albuminoid Ammonia	..	0.0218
Oxygen absorbed in 4 hrs. at 80°F.	..	0.005

## Bacteriological Results.

No. of Bacteria per c.c. or ml.—

On Agar in 3 days at 20°C.	..	38
1 day at 37°C.	..	8
2 days at 37°C.	..	13

The Bacillus Coli ..	..	Present in —. Absent in 100 c.c.
Bacillus Welchii ..	..	Present in —. Absent in 100 c.c.
(B. Enteriditis Sporogenes)		

*Report :* “ This sample is reasonably clear and bright and of normal colour. The water is very faintly alkaline in reaction, is tidal in character as regards its salinity, and is of satisfactory organic and bacterial purity.

It is, therefore, considered suitable and safe for Swimming Pool purposes.”

(Signed) E. V. SUCKLING.

**HOUSING.****ERADICATION OF BED BUGS.**

During the year two houses were treated following the evidence of bug infestation.

The two cases were treated as follows :—

- (a) This was a terrace-type house and was treated prior to the tenant moving into a Council house. The

“ Cimex ” method was used under the supervision of the Sanitary Inspectors, and the whole house was put under gas. No further complaints regarding bug infestation have been received.

- (b) This was a detached house and only one room was treated. “ Zaldecide ” was sprayed over all surfaces in the room, and no further complaints have been received regarding bug infestation.

#### HOUSING STATISTICS FOR THE YEAR 1937.

Number of new houses erected during the year :—

(a) Total (including number given separately under (b) )	415
(b) Under the Housing Acts :—	
(i) By the Local Authority .. .. .	67
(ii) By other bodies or persons .. .. .	Nil

These are set out in detail in the table on page 46.

#### 1. *Inspection of Dwelling Houses during the year :—*

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) .. .. .	391
(b) Number of Inspections made for the purpose..	1,092
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 .. .. .	109
(b) Number of Inspections made for the purpose..	500
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation .. .. .	36
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation .. .. .	140

2. *Remedy of Defects during the year without Service of Formal Notices :—*

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers .. ..	89
---	----

3. *Action under Statutory Powers during the year :—*

A.—Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936.

(1) Number of dwelling-houses in respect of which notices were served requiring repairs ..	Nil
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—	
(a) By Owners .. .. .	Nil
(b) By Local Authority in default of Owners ..	Nil

B.—Proceedings under Public Health Acts.

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied .. .. .	56
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—	
(a) By Owners .. .. .	49
(b) By Local Authority in default of Owners ..	Nil

C.—Proceedings under Sections 11 and 13 of the Housing Act, 1936.

(1) Number of dwelling-houses in respect of which Demolition Orders were made .. ..	9
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders :—	
(a) By Owners .. .. .	13
(b) By Local Authority in default of Owners ..	1

D.—Proceedings under Section 12 of the Housing Act, 1936.

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made .. .. .	Nil
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit .. .. .	Nil

4. *Housing Act, 1936—Part IV.—Overcrowding :—*

(a) (i) Number of dwellings overcrowded at end of year .. .. .	56
(ii) Number of families dwelling therein ..	56
(iii) Number of persons (equivalent) dwelling therein	371
(b) Number of new cases of overcrowding reported during the year .. .. .	2
(c) (i) Number of cases of overcrowding relieved during the year .. .. .	47
(ii) Number of persons (equivalent) concerned in such cases .. .. .	303½
(d) Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding .. .. .	Nil
(e) Good progress has been made during the year towards the abatement of overcrowding, the number of cases existing at the end of 1937 being 56 as compared with 101 a year before.	

Observation is kept of the records of border line houses so that when they become overcrowded due to the increasing ages of the inmates they are reported to the Public Health Committee.

The particulars of the houses erected by the District Council up to the end of 1937 are given on page 47.

TABLE SHOWING THE NUMBER OF HOUSES IN EACH PARISH WITH A PIPED WATER SUPPLY, MAIN DRAINAGE, AND THE PUBLIC CLEANSING SERVICE.

Parish.	No. of Houses in Parish.	Water Supply.				From Southend Co.'s Main.	Total.	Sewerage.	Public Cleansing.		
		From Council's Watermain.			Total.						
		Domestic.	Domestic and Trade.	Special Supply.							
Great Baddow S.P.A.	1,054	} 1291	57	12	1360	—	1360	{ 968	974	Night Soil.	
Great Baddow O.S.P.A.	334		10	2	208	—	208		204		
Little Baddow ..	264		196	1	90	—	90		—		212
Boreham ..	317		407	10	4	421	—		421		416
Broomfield ..	471		—	—	—	—	—		—		—
Chignal ..	112		555	23	4	582	—		582		—
Danbury ..	667		—	—	—	—	—		—		—
Good Easter ..	109		86	17	2	105	—		105		—
East Hanningfield ..	127		16	7	—	23	221		244		—
South Hanningfield ..	359		43	14	—	57	—		57		—
West Hanningfield ..	173		532	54	15	601	—		601		478
Ingatstone and Fryerning ..	664		14	—	—	14	—		14		—
Great Leighs ..	219		8	—	—	8	—		8		—
Little Leighs ..	62		63	6	1	70	—		70		—
Margaretting ..	185		—	—	—	—	—		—		—
Mashbury ..	42		—	—	—	—	111		111		*113
Mountnessing ..	241		—	—	—	—	—		—		213
Pleshey ..	82		—	—	—	—	—		—		—
Rettendon ..	261		228	20	3	251	—		251		—
Roxwell ..	242		—	—	—	—	—		—		—
Runwell ..	336	296	17	14	327	—	327	76			
Sandon ..	205	92	25	2	119	—	119	—			
Springfield ..	114	18	—	—	18	—	18	—			
Stock ..	330	145	16	1	162	—	162	—			
Great Waltham ..	580	2	—	—	2	—	2	—			
Little Waltham ..	241	14	—	—	14	—	14	—			
Woodham Ferrers ..	583	502	39	10	551	—	551	—			
Writtle S.P.A. ...	701	} 582	26	1	609	—	609	{ 577	595		
Writtle O.S.P.A. ...	213		—	—	—	—	—		—	—	
Totals	9,288	5,179	342	71	5,592	332	5,924	2,625	3,523	286	

\*56 to Mountnessing, 57 to Ingatstone Works.

TABLE SHOWING THE NUMBER OF HOUSES ERECTED  
DURING 1937 AND IN COURSE OF ERECTION AT THE  
END OF THE YEAR.

Parish.	NUMBER OF HOUSES.					
	Erected during 1937.			In course of erection at end of 1937.		
	By District Council.	By private persons.	Totals.	By District Council.	By private persons.	Totals.
Baddow, Great ...	6	143	149	84	53	137
Baddow, Little ...	—	11	11	—	—	—
Boreham ...	24	4	28	—	—	—
Broomfield ...	5	33	38	—	2	2
Chignal ...	—	2	2	—	—	—
Danbury ..	—	30	30	—	9	9
Good Easter ...	—	—	—	6	—	6
Hanningfield, East ...	6	—	6	—	1	1
Hanningfield, South ...	—	17	17	—	2	2
Hanningfield, West ...	—	—	—	—	1	1
Ingatstone and Fryerning ...	—	2	2	8	—	8
Leighs, Great ...	—	8	8	—	1	1
Leighs, Little ...	—	—	—	—	—	—
Margaretting ...	12	—	12	—	2	2
Mashbury ...	—	—	—	—	—	—
Mountnessing ...	—	1	1	—	1	1
Pleshey ...	—	—	—	—	—	—
Rettendon ...	—	2	2	—	—	—
Roxwell ...	14	5	19	—	2	2
Runwell ...	—	16	16	—	11	11
Sandon ...	—	8	8	—	7	7
Springfield ...	—	6	6	—	1	1
Stock ...	—	8	8	—	10	10
Waltham, Great ...	—	3	3	—	1	1
Waltham, Little ...	—	9	9	—	5	5
Woodham Ferrers ...	—	25	25	18	3	21
Writtle ...	—	21	21	10	3	13
Totals...	67	354	421	126	115	241



## COUNCIL HOUSES.

PARISH.	HOUSES ERECTED UNDER						Totals.
	The Housing Act, 1890.	The State-aided Scheme charges being a General Rate limited to 1d. Rate.	The Housing (Financial Provisions) Act, 1924.	The Housing Act, 1925.	The Housing Act, 1930.	The Housing Act, 1936.	
	1.	2.	3.	4.	5.	6.	
Baddow, Great (s.p.a.) ..	—	51	57	..	—	6	114
Baddow, Great (o.s.p.a.) ..	—	12	16	16	—	—	44
Baddow, Little ..	6	—	8	—	—	—	14
Boreham ..	—	—	46	—	12	18	76
Broomfield ..	—	—	40	—	6	5	51
Chignal ..	—	—	8	—	—	—	8
Danbury ..	6	25	4	—	—	—	35
Good Easter ..	—	6	—	—	—	—	6
Hanningfield, East ..	—	—	12	—	—	6	18
Hanningfield, South ..	6	—	—	—	—	—	6
Hanningfield, West ..	—	—	4	—	—	—	4
Ingatestone and Fryerning ..	2†	30	32	—	2	—	66
Leighs, Great ..	—	—	10	—	—	—	10
Leighs, Little ..	—	—	6	—	—	—	6
Margaretting ..	—	6	—	—	—	12	18
Mashbury ..	—	—	—	—	—	—	—
Mountnessing ..	—	8	—	—	—	—	8
Pleshey ..	—	—	4	—	—	—	4
Rettendon ..	—	—	26	—	—	—	26
Roxwell ..	—	—	12	—	—	14	26
Runwell ..	—	—	—	—	—	—	—
Sandon ..	4	4	6	—	—	—	14
Springfield ..	—	—	—	—	—	—	—
Stock ..	—	—	10	4	—	—	14
Waltham, Great (Village area) ..	—	—	20	—	—	—	20
Waltham, Great (Ford End) ..	—	—	12	—	—	—	12
Waltham, Little ..	—	—	6	—	—	—	6
Woodham Ferrers ..	—	4	24	—	—	—	28
Writtle (s.p.a.) ..	—	16	102	31†	—	—	149
Writtle (o.s.p.a.) ..	—	—	12	—	—	—	12
Totals ..	24	162	477	51	20	61	795

†Ingatestone Waterworks Cottages.

‡Including 12 Cottages, the cost of which was borne by the Housing Estates Repairs Fund.

PARTICULARS AS TO ACTION TAKEN UNDER SECTIONS 19, 20, AND 21 OF THE HOUSING ACT, 1930, DURING THE 4 YEARS 1933-36, AND UNDER SECTIONS 11-13 OF THE HOUSING ACT, 1936, DURING 1937.

Year.	Representations made that houses are unfit for habitation.	Number of houses reconditioned.	Number of houses demolished.	Number otherwise dealt with.
1933 .. ..	12	6	6	—
1934 .. ..	43	2	4	—
1935 .. ..	23	6	14	1
1936 .. ..	12	2	9	—
1937 .. ..	33	8	14	—
Totals ..	123	24	47	1

The following tabular statement sets out the position of the eleven Clearance Areas considered by the Council as at the end of 1937 :—

Number.	Premises.	No. of houses.	Position at end of 1937.
1	Almshouses and Church Cottage, Bell Street, Great Baddow	7	Houses unoccupied & awaiting demolition
2	4-8, Providence Cottages, Boreham	5	Tenants re-housed. Premises demolished
3	Kings Arms Yard Cottages, Broomfield	6	Tenants re-housed. Houses demolished
4	Forteseue's Farm Cottages, Good Easter	2	Area not confirmed. Action to be taken under Sec. 11, Housing Act, 1936
5	Pond Cottages, Mountnessing	5	One House still in occupation, 3 Houses demolished
6	Peartree Cottages, Roxwell	2	Houses unoccupied & awaiting demolition
7	Two Cottages, Bridge Street, Writtle	2	Houses unoccupied. Partly demolished
8	1, 2, and 3, Sowman's Cottages, Lower Green, Galleywood, Great Baddow	3	Awaiting Public Inquiry by Ministry of Health.
9	2, 3, 4 and 5, Well Lane, Galleywood, Great Baddow	4	Do.
10	Prentices Cottages, Springfield	3	Do.
11	Blind Pond Cottages, Castle-don Road, Downham, South Hanningfield	3	Do.

## RURAL DISTRICT OF CHELMSFORD.

## RETURN REGARDING THE HOUSING CONDITIONS OF PERSONS OF THE WORKING CLASSES.

PARISH.	No. of Houses known to be Totally Unfit for Human Habitation or otherwise requiring to be Demolished.								No. of Houses known not to be in all respects reasonably fit for Human Habitation.								No. of Houses in which Over-crowding is known to Exist.				Provision of New Council Houses.				
	No. on 31st December, 1936.		No. found during year ended 31st December, 1937.		No. of Houses during period 1st January to 31st December, 1937		No. on 31st December, 1937.		No. on 31st December, 1936.		No. found during year ended 31st December, 1937.		No. rendered habitable during period 1st January to 31st December, 1937.	No. on 31st December, 1937.		No. on 31st December, 1936.	No. found during year ended 31st December, 1937.	No. remedied during year ended 31st December, 1937.	No. remaining on 31st December, 1937.	No. erected during year ended 31st December, 1937	Estimated No. of Houses required during year ending 31st March, 1939, to meet :		Total No. of Houses approved by Minister, but not completed.	Total No. of Houses contemplated for erection in the year ending 31st March, 1939, but not yet approved by Minister.	
																					Over-crowding.	Normal Expansion.			
Great Baddow .. .. .	16	2	4	—	2	2	12	6	8	—	17	—	15	10	—	10	—	5	5	6	6	96	90	12	
Little Baddow .. .. .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	2	—	2	—	—	4	
Boreham .. .. .	11	—	—	2	—	—	5	8	1	—	8	—	5	4	—	9	—	6	3	24	4	8	—	12	
Broomfield .. .. .	1	1	1	—	2	—	1	—	3	—	3	—	3	3	—	7	—	6	1	5	—	30	—	30	
Chignal .. .. .	—	—	3	—	—	—	3	—	—	—	1	—	1	—	—	1	—	—	1	—	1	3	—	4	
Danbury .. .. .	—	—	—	1	—	—	—	1	—	—	23	—	19	4	—	2	—	1	1	—	—	—	—	—	
Good Easter .. .. .	4	—	1	—	—	2	3	—	—	—	6	—	6	—	—	3	—	2	1	6	1	—	—	1	
East Hanningfield .. .. .	6	—	—	—	1	—	3	2	—	—	—	—	—	—	—	1	—	—	1	—	1	11	—	12	
South Hanningfield .. .. .	—	—	6	—	1	—	4	1	—	—	1	—	1	—	—	1	—	—	1	—	2	2	—	4	
West Hanningfield .. .. .	—	—	—	—	—	—	—	—	—	—	12	—	12	—	—	4	—	1	3	—	4	56	32	28	
Ingatstone and Fryerning .. .. .	3	—	3	—	3	—	2	1	2	—	4	—	4	2	—	5	—	3	2	—	4	56	32	28	
Great Leighs .. .. .	1	—	—	—	—	1	—	—	2	—	—	—	—	—	—	6	—	2	4	—	1	9	—	19	
Little Leighs .. .. .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	
Margaretting .. .. .	—	—	4	—	—	1	3	—	—	—	1	—	1	—	—	1	1	—	2	12	—	—	—	—	
Mashbury .. .. .	2	—	—	—	—	2	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	
Mountnessing .. .. .	6	—	5	—	3	—	8	—	5	—	11	—	10	6	—	2	—	—	2	—	2	26	28	—	
Pleshey .. .. .	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	6	—	6	
Rettendon .. .. .	1	—	3	—	1	—	2	1	—	—	7	—	6	1	—	1	—	1	—	—	—	8	—	8	
Roxwell .. .. .	4	—	—	—	—	—	—	4	17	—	1	—	1	17	—	3	—	1	2	14	2	—	—	2	
Runwell .. .. .	—	—	—	—	—	—	—	—	1	—	6	—	3	4	—	4	—	1	3	—	—	—	—	—	
Sandon .. .. .	—	—	—	—	—	—	—	—	2	—	1	—	—	3	—	1	—	—	1	—	—	20	—	20	
Springfield .. .. .	3	1	—	—	1	—	3	—	1	—	2	—	3	—	—	1	—	—	1	—	—	12	—	12	
Stock .. .. .	—	—	1	—	—	—	—	1	—	—	20	—	16	4	—	3	—	1	2	—	2	—	—	2	
Great Waltham .. .. .	1	1	2	—	—	—	3	1	6	—	5	—	9	2	—	8	1	3	6	—	6	—	—	6	
Little Waltham .. .. .	—	—	—	—	—	—	—	—	5	—	2	—	3	4	—	5	—	2	3	—	4	2	—	6	
Woodham Ferrers .. .. .	1	1	—	—	1	—	—	1	—	—	4	—	—	4	—	4	—	1	3	—	4	26	18	12	
Writtle .. .. .	6	—	—	—	4	—	—	2	17	—	5	—	20	2	—	14	—	9	5	—	8	72	—	80	
	66	6	33	3	19	8	52	29	70	—	140	—	138	72	—	101	2	47	56	67	50	395	174	271	



The District Council decided to erect a further 531 houses to meet the normal expansion of population, to abate overcrowding, and to provide alternative accommodation for displaced tenants living in unfit houses. At the end of the year 61 houses under this programme were already erected.

Details are shown in the following table :—

Parish.	Programme.	Already erected.	In course of construction.	Contracts let.	Sites being negotiated for or already acquired.	Sites to be acquired.
Great Baddow	90	6	84	—	—	—
Do. (Galleywood)	28	16	—	—	12	—
Little Baddow ..	4	—	—	—	4	—
Boreham ..	36	24	—	—	—	12
Broomfield ..	36	12	—	—	—	24
Chignal ..	4	—	—	—	—	4
Danbury ..	—	—	—	—	—	—
Good Easter ..	6	—	6	—	—	—
East Hanningfield ..	6	6	—	—	—	—
South Hanningfield	12	—	—	—	—	12
West Hanningfield	4	—	—	—	—	4
Ingatestone and Fryerning ..	62	2	8	24	28	—
Great Leighs ..	10	—	—	—	—	10
Little Leighs ..	—	—	—	—	—	—
Margaretting ..	12	12	—	—	—	—
Mashbury ..	—	—	—	—	—	—
Mountnessing ..	30	—	—	—	30	—
Pleshey ..	6	—	—	—	6	—
Rettendon ..	8	—	—	—	—	8
Roxwell ..	17	14	—	—	—	3
Runwell ..	—	—	—	—	—	—
Sandon ..	20	—	—	—	20	—
Springfield ..	12	—	—	—	12	—
Stock ..	6	4	—	—	—	2
Great Waltham ..	6	—	—	—	—	6
Little Waltham ..	6	—	—	—	6	—
Woodham Ferrers ..	30	—	18	—	12	—
Writtle ..	68	—	—	—	68	—
Do. (Highwood) ..	12	—	10	—	—	2
Totals ..	531	96	126	24	198	87



## TOWN PLANNING.

By agreement several Local Authorities in the Mid-Essex area, including Chelmsford Rural District Council, delegated their powers in connection with the preparation of Town Planning Schemes to the Mid-Essex Regional Planning Committee, and the agreement came into force on 1st April, 1933.

## INSPECTION AND SUPERVISION OF FOOD.

### (a) MILK SUPPLY.

*Graded Milk.* The following licences were issued during the year :—

Licences to bottle and sell "Tuberculin Tested "	
Milk .. .. .	5
Dealer's Licences to bottle and sell "Tuberculin	
Tested " Milk .. .. .	1
Dealer's Supplementary Licences to sell "Tuber-	
culin Tested " Milk .. .. .	1
Licences to bottle and sell "Accredited " Milk ..	3
Dealer's Licences to sell "Accredited " Milk ..	1
Dealer's Supplementary Licences to sell "Accred-	
ited " Milk .. .. .	2
Dealer's Licences to bottle and sell "Pasteurised "	
Milk .. .. .	2
Dealer's Supplementary Licences to sell "Pasteur-	
ised " Milk .. .. .	3

### *Dairies, Cowsheds and Milkshops.*

The standard of premises outlined in the Milk and Dairies Order, 1926, has not meant any alteration in the standard previously adopted by the District Council.

The Index of Work on pages 36 to 38 shows the improvements carried out during the year on dairy farm premises as a result of consultations or requests from your Sanitary Inspector's Department.

The table on page 51 shows the number of premises in respect of which application for registration has been made since the passing of the Milk and Dairies (Amendment) Act, 1922, and trading during the year 1937.



PREMISES IN RESPECT OF WHICH APPLICATION FOR REGISTRATION HAS BEEN MADE  
SINCE THE PASSING OF THE MILK AND DAIRIES (AMENDMENT) ACT, 1922, AND  
TRADING DURING THE YEAR 1937.

51

Parish.	Cowkeepers' Premises.						Retail Purveyors of Milk who are not Cowkeepers.		Totals.
	Wholesale Purveyors of Milk.		Wholesale & Retail Purveyors of Milk.		Retail Purveyors of Milk.				
	Regis-tered.	Registra- tion not issued at end of year	Regis-tered.	Registra- tion not issued at end of year	Regis-tered.	Registra- tion not issued at end of year	Regis-tered.	Registra- tion not issued at end of year	
Boreham	2	—	3	—	—	—	—	5	
Broomfield	2	—	—	—	—	—	—	4	
Chignal	2	—	—	—	—	—	—	3	
Danbury	4	—	3	—	—	—	—	11	
East Hanningfield	15	—	—	—	—	—	—	16	
Great Baddow	6	—	4	—	—	—	—	17	
Great Leighs	—	—	1	—	—	—	—	3	
Great Waltham	2	—	—	—	—	—	—	4	
Ingatestone and Fryerning	9	—	3	—	—	—	—	16	
Little Baldow	—	—	4	—	—	—	—	6	
Little Leighs	1	—	—	—	—	—	—	2	
Little Waltham	—	—	2	—	—	—	—	3	
Margaretting	2	—	3	—	—	—	—	6	
Mountnessing	8	—	1	—	—	—	—	10	
Pleshey	—	—	—	—	—	—	—	—	
Rettendon	13	—	4	—	—	—	—	18	
Roxwell	4	—	1	—	—	—	—	6	
Runwell	2	—	2	—	—	—	3	8	
Sandon	5	—	3	—	—	—	2	10	
South Hanningfield	10	—	2	—	—	—	4	16	
Springfield	1	—	1	—	—	—	—	3	
Stock ...	5	—	2	—	—	—	—	8	
West Hanningfield	5	—	3	—	—	—	—	9	
Woodham Ferrers	15	—	4	—	—	—	1	22	
Writtle	14	—	2	—	—	—	1	22	
Unclassified	—	—	—	—	—	—	19	19	
TOTALS	127	—	48	—	—	—	39	247	

During the year the Essex County Council tested 179 samples of milk, purchased in Chelmsford Rural District, for tubercle bacilli, and 12 samples proved to be infected.

There has been a decrease of 11 purveyors of milk during 1937. Before a registration certificate is issued in respect of any dairy premises, such premises are inspected and any necessary improvements are notified to the occupier. In all cases careful supervision is given and advice is at all times welcomed by the good farmer who is anxious to produce and supply clean milk.

(b) MEAT INSPECTION.

1,337 inspections were made at slaughterhouses and butchers' shops. There are 14 slaughterhouses distributed throughout the district. As a result of the visits, 7,489 lbs. of meat were condemned as diseased or unsound and unfit for the food of man. This work, as will be gathered, is very important and occupies a good deal of your Meat Inspectors' time.

CARCASES INSPECTED AND CONDEMNED.

	Cattle, exclud- ing Cows.	Cows.	Calves.	Sheep and Lambs.	Pigs.
Number inspected ..	406	1	69	907	2479
<i>All Diseases except Tuberculosis—</i>					
Whole carcasses condemned ..	1	—	—	—	6
Carcasses of which some part or organ was condemned..	16	—	4	5	125
Percentage of the number inspected affected with disease other than Tuberculosis .. ..	4.19	—	5.80	0.55	5.28
<i>Tuberculosis only—</i>					
Whole carcasses condemned	3	1	—	—	2
Carcasses of which some part or organ was condemned..	19	—	—	—	230
Percentage of the number inspected affected with Tuberculosis .. ..	5.42	100	—	—	9.36

The Slaughter of Animals Act, 1933, came into operation on 1st January, 1934, and provides for the licensing of slaughtermen and the humane and scientific slaughter of animals.

There are 34 slaughtermen licensed with the Council.

The following is a list of the slaughterhouses in occupation at the end of 1937 :—

*Registered Slaughterhouses.*

Parish.	Occupier.
Boreham ..	.. Rowe, B. R.
Broomfield ..	.. Snow Bros.
Ingatestone	.. H. Wright & Sons.
Great Waltham	.. Campen, L. L.
„	.. Wroot, D. C.
Writtle ..	.. Green & Sons.

*Permanently Licensed Slaughterhouses.*

Ingatestone	.. Fincham, A.
Little Waltham	.. Campen, W. E.

*Annually Licensed Slaughterhouses.*

Great Baddow	.. Copsey & Sons.
Little Baddow	.. Alexander, A. N.
South Hanningfield	.. Patten, J.
Great Leighs	.. Collier, W. J.
Mashbury ..	.. Matthews, R.
Great Waltham	.. Cass, J.

A “ Registered ” Slaughterhouse is one which was in use prior to the coming into force of the Public Health Act, 1875, and which has remained in continuous use since that time.

A “ Permanently Licensed ” Slaughterhouse is one which was brought into use or erected after the coming into force of the Public Health Act, 1875, but before the 5th June, 1922.

An “ Annually Licenced ” Slaughterhouse is one which was first used or erected after the 5th June, 1922. The occupier of such a slaughterhouse may only use it as such if the Rural District Council have granted him a licence. These licences expire on the 31st December of each year and are renewable by the Council.

During August, legal proceedings were taken under the Public Health (Meat) Regulations, 1924, against a dealer slaughtering in the District, for failing to give notice to the Local Authority that part of the carcass of an animal slaughtered for human consumption showed evidence of being diseased.

The Magistrates convicted and the defendant was fined £20 and £6 5s. 6d. costs.

(c) BAKEHOUSES.

The following table shows the number of bakehouses in occupation at the end of the year :—

Parish.	Occupier.
Great Baddow ..	.. Carter & Sons.
„ ..	.. Cottee, C. J.
Broomfield ..	.. Bush, G.
„ ..	.. Parsons, G. J.
Boreham ..	.. Church, A. W.
Danbury ..	.. Digby, H.
„ ..	.. Roast, E.
„ ..	.. Upson, E. S.
„ ..	.. Smith, H.
Good Easter ..	.. Aplin, F. W.
Great Leighs ..	.. Boon, R.
Little Leighs ..	.. Mann, F.
Margaretting ..	.. Bartrop, C.
„ ..	.. Warder, J. E.
Ingatestone ..	.. Warder, E. N.
„ ..	.. Davies, M. J. (Mrs.)
„ ..	.. Raven, S. A.
Rettendon ..	.. Benson, H. & E.
„ ..	.. Coates, C. S.
Roxwell ..	.. Prior, J.
Stock ..	.. Cottee, A. C.
South Hanningfield ..	.. Warder, G.
Great Waltham ..	.. Biggs, A. & E.
Little Waltham ..	.. Hicks, F. G.

Parish.	Occupier.
Woodham Ferrers	.. Johnson, C. J.
„ ..	.. Fawcett, R. & R. A.
Writtle ..	.. Hance, E. E.
„ ..	.. Lodge, E. W.

## PREVALENCE AND CONTROL OVER INFECTIOUS DISEASES.

### INFECTIOUS DISEASES GENERALLY.

There were 74 cases of infectious diseases (exclusive of Tuberculosis) notified during the year as compared with 93 for 1936 and 250 for 1935.

Of these cases, 46 were Scarlet Fever and 13 Diphtheria.

The incidence of notifiable diseases in the area during the year 1937 is set out in the table on page 57, and the local distribution on page 58.

No Schick or Dick tests were carried out during the year.

There was no undue prevalence of notifiable infectious diseases in any particular locality.

Measles was prevalent throughout most of the district during the early part of the year. The type was, on the whole, mild.

The only notified Dysentery case related to an inmate in a Mental Hospital. The case proved fatal.

### PREVENTION OF BLINDNESS.

No action was found necessary during the year under Section 66 of the Public Health Act, 1925, or under Section 176 of the Public Health Act, 1936, for the prevention of blindness or for the treatment of persons suffering from any disease or injury to the eyes.



## TUBERCULOSIS.

No action was found necessary under the Public Health (Prevention of Tuberculosis) Regulations, 1925 (relating to persons suffering from Pulmonary Tuberculosis employed in the milk trade), or under Section 62 of the Public Health Act, 1925, or Section 172 of the Public Health Act, 1936 (relating to the compulsory removal to hospital of persons suffering from Tuberculosis).

During the year there were 19 deaths due to Tuberculosis (13 Pulmonary and 6 Non-Pulmonary).

The ratio of non-notified Tuberculosis deaths to the total Tuberculosis deaths was 32 per cent. There were no cases of wilful neglect to notify.

The following table gives particulars of new cases of Tuberculosis and deaths from the disease during the year.

Age Periods.	*New Cases.				Deaths.			
	Respiratory.		Non-Respiratory.		Respiratory.		Non-Respiratory.	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 ...	—	—	—	—	—	—	1	—
1 to 5 ...	—	—	—	3	—	—	—	—
5 „ 15 ...	—	1	4	—	—	—	1	1
15 „ 25 ...	1	2	—	2	—	3	1	—
25 „ 35 ...	4	5	—	2	—	3	—	—
35 „ 45 ...	2	2	—	—	3	—	—	—
45 „ 55 ...	—	—	—	—	1	2	—	1
55 „ 65 ...	1	—	1	—	1	—	—	—
65 and upwards ...	1	—	—	—	—	—	—	1
TOTALS ...	9	10	5	7	5	8	3	3

\*Not including cases of tuberculosis removed into the district during the year, which had been previously notified elsewhere.



## NOTIFIABLE DISEASES DURING THE YEAR (EXCLUSIVE OF TUBERCULOSIS).

Notifiable Disease.	Total Cases Notified.	Under 1	1—2	2—3	3—4	4—5	5—10	10—15	15—20	20—35	35—45	45—65	65 or over	Cases admitted to Hospital	Total Deaths
Smallpox ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever ..	46	—	1	1	1	1	22	12	—	5	2	1	—	36	—
Diphtheria ..	13	—	—	—	1	—	5	4	—	—	—	3	—	13	1
Enteric Fever (including Paratyphoid)	1	—	—	—	—	—	—	—	1	—	—	—	—	1	—
Puerperal Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Pyrexia ..	2	—	—	—	—	—	—	—	—	—	2	—	—	—	—
Pneumonia (Primary and Influenzal)	5	—	1	—	—	—	—	1	—	—	—	3	—	2	6*
Acute Poliomyelitis ..	2	—	—	—	—	—	1	1	—	—	—	—	—	1	1
Dysentery ..	1	—	—	—	—	—	—	—	—	—	—	—	1	1	1
Erysipelas ..	4	—	—	—	—	—	—	—	—	—	2	—	2	1	—
Totals ..	74	—	2	1	2	1	28	18	1	5	6	7	3	55	9

\*5 not notified.

TABLE SHOWING LOCAL DISTRIBUTION OF CASES  
NOTIFIED DURING 1937.

PARISH.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Puerperal Pyrexia.	Pneumonia.	Acute Poliomyelitis.	Dysentery.	Erysipelas.	Pulmonary Tuberculosis.	Other forms of Tuberculosis.	Total.
Great Baddow .. .. .	13	1	—	—	—	1	—	—	4	5	24
Little Baddow .. .. .	2	—	—	—	—	—	—	—	—	1	3
Boreham .. .. .	5	—	—	—	—	—	—	—	1	1	7
Broomfield .. .. .	2	—	—	—	—	—	—	—	1	—	3
Chignal .. .. .	—	—	—	—	—	—	—	—	—	—	—
Danbury .. .. .	4	—	—	1	—	1	—	1	2	1	10
Good Easter .. .. .	1	—	—	—	—	—	—	—	—	1	2
East Hanningfield .. .. .	—	—	—	—	—	—	—	—	1	—	1
South Hanningfield .. .. .	—	—	—	—	—	—	—	—	2	—	2
West Hanningfield .. .. .	—	—	—	—	—	—	—	1	—	—	1
Ingatestone and Fryerning .. .. .	—	—	—	—	—	—	—	—	—	2	2
Great Leighs .. .. .	—	—	—	—	—	—	—	—	—	—	—
Little Leighs .. .. .	—	—	—	—	—	—	—	—	—	—	—
Margaretting .. .. .	—	—	—	—	—	—	—	—	—	—	—
Mashbury .. .. .	—	—	—	—	—	—	—	—	—	—	—
Mountnessing .. .. .	—	3	—	—	—	—	—	—	—	1	4
Pleshey .. .. .	—	—	—	—	—	—	—	—	—	—	—
Rettendon .. .. .	1	—	—	—	—	—	—	—	—	—	1
Roxwell .. .. .	5	2	—	—	—	—	—	—	1	—	8
Runwell .. .. .	2	3	—	—	1	—	1	—	2	1	10
Sandon .. .. .	1	—	—	—	—	—	—	—	1	—	2
Springfield .. .. .	—	—	—	—	—	—	—	—	—	—	—
Stock .. .. .	—	1	—	—	2	—	—	1	1	—	5
Great Waltham .. .. .	—	—	—	1	2	—	—	—	2	—	5
Little Waltham .. .. .	—	—	—	—	—	—	—	1	—	—	1
Woodham Ferrers .. .. .	3	—	—	—	—	—	—	—	3	—	6
Writtle .. .. .	7	3	1	—	—	—	—	—	1	—	12
Totals .. .. .	46	13	1	2	5	2	1	4	22	13	109

## FACTORIES, WORKSHOPS AND WORKPLACES.

### 1.—Inspection of Factories, Workshops and Workplaces.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
<b>Factories</b> ... ..	22	8	—
(Including Factory Laundries)			
<b>Workshops</b> ... ..	47	9	—
(Including Workshop Laundries)			
<b>Workplaces</b> ... ..	—	—	—
(Other than Outworkers' Premises)			
<b>Total</b> ... ..	69	17	—

### 2.—Defects found in Factories, Workshops and Workplaces.

Particulars. (1)	Number of Defects.			Number of Prosecu- tions. (5)
	Found. (2)	Remedied. (3)	Referred to H.M. Inspector. (4)	
<i>Nuisances under the Public Health Acts. ‡</i>				
Want of cleanliness ... ..	1	1	—	—
Want of ventilation ... ..	—	—	—	—
Overcrowding ... ..	—	—	—	—
Want of drainage of floors ... ..	—	—	—	—
Other nuisances ... ..	1	—	—	—
Sanitary accommodation { insufficient ... ..	—	1	—	—
{ unsuitable or defective ... ..	3	3	—	—
{ not separate for sexes ... ..	—	—	—	—
<i>Offences under the Factory and Workshop Acts :—</i>				
Illegal occupation of underground bakehouse (s. 101) ... ..	—	—	—	—
Other offences ... ..	12	9	—	—
(Excluding offences relating to out-work and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories & Workshops Transfer of Powers) Order, 1921).				
<b>Total</b> ... ..	17	14	—	—

‡Including those specified in sections 2, 2, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

# REPORT OF PETROLEUM INSPECTOR.

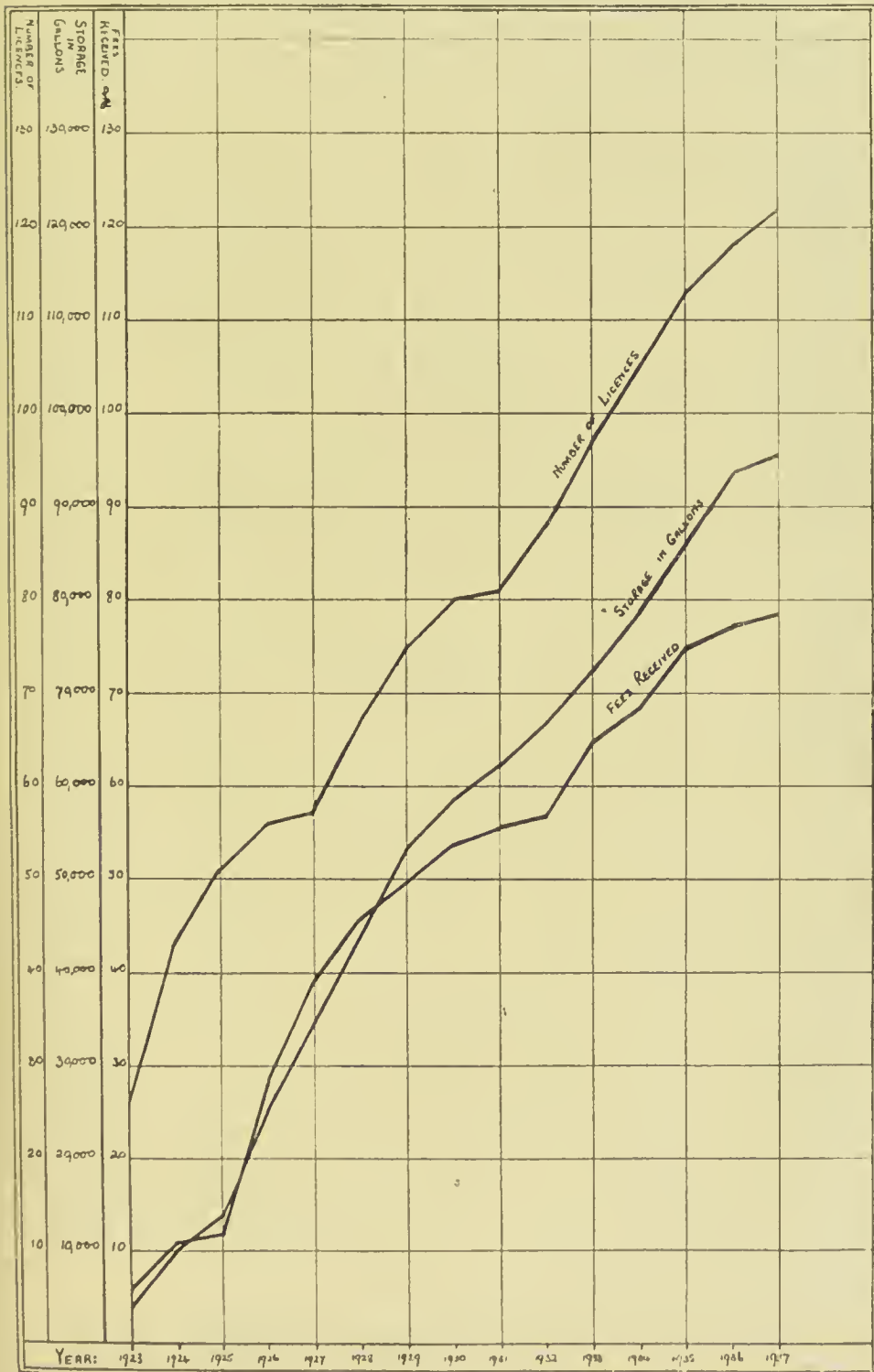
(A. DENTON OGDEN, F.R.S.I. F.S.I.A.,).

Mr. Chairman and Gentlemen,

The following table shows the rate of increase in the issue of licences, storage quantities and fees received :—

Year.	No. of Licences.			Storage in gallons.		Fees received.		
						£	s.	d.
1923	..	26	..	4,890	..	6	10	0
1924	..	43	..	10,132	..	10	15	0
1925	..	51	..	13,902	..	11	15	0
1926	..	56	..	25,198	..	28	0	0
1927	..	57	..	34,832	..	39	10	0
1928	..	67	..	44,642	..	45	15	0
1929	..	75	..	53,544	..	49	10	0
1930	..	80	..	58,730	..	53	15	0
1931	..	81	..	62,276	..	55	10	0
1932	..	88	..	66,916	..	56	15	0
1933	..	97	..	72,366	..	64	10	0
1934	..	105	..	78,646	..	68	5	0
1935	..	113	..	86,156	..	74	15	0
1936	..	118	..	93,676	..	77	0	0
1937	..	122	..	95,796	..	78	5	0

The following Graph shows the rise in the number of licences. etc., for the the storage of Petroleum Spirit since 1923.



The accompanying table (pages 62 to 64) shows particulars of licences in operation during the year:—

PETROLEUM LICENCES IN FORCE DURING 1937.

(Storage Capacity in Gallons).

Name of Licensee.	Parish.	Tanks.	Cans.	Total.
Ford Inst. of Agricultural Engineering ...	Boreham	—	90	90
Lister, W. L. ...	"	500	—	500
Mouser, J. J. ...	"	1,500	—	1,500
Rand, F. A. ...	"	500	—	500
Roper, W. F. ...	"	2,000	—	2,000
Seabrook, W. & Sons, Ltd. ...	"	300	—	300
Day, J. ...	Broomfield	3,000	—	3,000
Duffy, J. ...	"	500	—	500
Harris, W. ...	"	300	—	300
Seabrook, Mrs. D. ...	"	500	—	500
Stubblings, C. ...	"	500	—	500
Stubbing, W. J. ...	"	300	—	300
Baker & Sons ...	Danbury	500	—	500
Baxter, G. L. ...	"	500	—	500
Christmas, W. T. ...	"	500	—	500
Clark, W. ...	"	500	—	500
Danbury Co-operators, Ltd. ...	"	500	—	500
Doe, P. ...	"	1,000	—	1,000
Holt, Sir Follet ...	"	500	—	500
Royce, R. R. (a) ...	"	300	—	300
Royce, R. R. (b) ...	"	1,400	—	1,400
Upson, E. S. ...	"	250	—	250
Vale, G. ...	"	1,300	—	1,300
Hawes, S. J. ...	East Hanningfield	500	—	500
Pudney, J. B. ...	"	500	—	500
Rayner, W. T. & J. A. ...	"	300	—	300
Whitnall, Miss S. ...	"	500	—	500
Aplin, F. W. ...	Good Easter	500	—	500
Matthews, J. A. ...	"	250	—	250
Speller, G. ...	"	500	—	500
Carter, H & Sons ...	Great Baddow	500	—	500
E.C.C. (Surveyor's Dept.) ...	"	500	—	500
Jackson, W. A. ...	"	1,800	—	1,800
Marven, D. ...	"	300	—	300
Shipp, J. H. ...	"	1,000	—	1,000
Sparrow, M. T. ...	"	200	—	200
Thomas & Evans, Ltd. ...	"	500	—	500
Waskett, W. A. ...	"	1,500	—	1,500
Sidgwick, J. E. ...	Great Leighs	400	—	400
Wells, C. J. ...	"	1,000	—	1,000
Whitworth, J. ...	"	400	—	400
Wright, J. S. ...	"	250	—	250
Bartrupt, L. ...	Great Waltham	500	—	500
Bartrupt, C. ...	"	500	—	500
Belfield, G. G. ...	"	300	—	300
Billingham, Dr. L. M. ...	"	300	—	300
Cass, J. ...	"	250	—	250
Haward, F. B. ...	"	1,300	—	1,300
Poulton, W. W. ...	"	1,600	—	1,600
Rogers, F. ...	"	500	—	500
Rowe, J. O. ...	"	200	—	200
Seabrook, E. ...	"	500	—	500
Carried forward ...		34,500	90	34,590



Name of Licensee.	Parish.	Tanks.	Cans.	Total.
	Brought forward...	34,500	90	34,590
Tufnell, J. J. ...	Great Waltham ...	500	—	500
Wood, J. M. ...	" ...	500	—	500
Ashton, H. S. ...	Ingatestone ...	500	—	500
Cliff, G. T. ...	" ...	500	—	500
Gaymer, R. C. ...	" ...	500	—	500
Green, P. ...	" ...	500	—	500
Hasler & Co., Ltd. ...	" ...	500	—	500
Hasler & Co., Ltd. ...	" ...	500	—	500
Hawkes, J. W. ...	" ...	1,500	400	2,200
Pudney, W. & A. ...	" ...	500	—	500
Russell, Mrs. G. H. ...	" ...	500	—	500
Warder, E. N. ...	" ...	500	—	500
Westle, J. E. ...	" ...	1,500	—	1,500
English Timber Supply Co., (Essex) Ltd. ...	Little Baddow ...	500	—	500
Seabrook, W. & Sons, Ltd. ...	Little Leighs ...	300	—	300
Amos, E. W. ...	Little Waltham ...	400	—	400
Cass, W. ...	" ...	3,000	—	3,000
Day, A. ...	" ...	1,000	—	1,000
Stewart, F. H. ...	" ...	500	—	500
Farrow, C. A. R. ...	Margaretting ...	3,000	—	3,000
Larcombe, A. W. B. ...	" ...	2,000	—	2,000
Leech, N. H. ...	" ...	500	—	500
Matthews, R. ...	Mashbury ...	250	—	250
Cotton, A. J. ...	Mountnessing ...	500	—	500
Eniffer, F. C. ...	" ...	2,300	—	2,300
Kean, G. ...	" ...	850	—	850
Knight, H. G. ...	Pleshey ...	250	—	250
Bevan, A. J. ...	Rettendon ...	500	—	500
Braun, Mrs. E. ...	" ...	1,200	—	1,200
Bright, W. A. ...	" ...	1,800	—	1,800
Cooper, W. ...	" ...	1,500	—	1,500
Evans, P. H. ...	" ...	2,000	—	2,000
Nicholls, F. ...	" ...	500	—	500
Smith, G. W. ...	" ...	500	—	500
Day, S. ...	Roxwell ...	500	—	500
Heathcote, F. ...	" ...	500	—	500
Menhinick, J. C. ...	" ...	500	—	500
Smith, R. W. ...	" ...	400	—	400
Mowlem, J. & Co., Ltd. ...	Runwell ...	—	100	100
Robinson, Mrs. D. E. ...	" ...	500	—	500
Warren, A. ...	" ...	1,500	—	1,500
Barr, J. ...	Sandon ...	2,000	—	2,000
Holmes, Major F. ...	" ...	500	—	500
Sandon Egg Farms ...	" ...	500	—	500
Marven, E. ...	South Hanningfield ...	—	20	20
Mayell, S. W. ...	" ...	500	—	500
Norton, F. A. ...	" ...	500	—	500
Ward, W. H. ...	" ...	250	—	250
Warder, G. W. C. ...	" ...	500	—	500
Fordson Estates Ltd. ...	Springfield ...	3,000	—	3,000
Lloyd George, Major R. ...	" ...	250	—	250
Magness, J. R. & Sons ...	" ...	300	—	300
Mack, W. G. ...	Stock ...	1,500	—	1,500
	Carried forward ...	80,350	610	80,960

Name of Licensee.	Parish,	Tanks.	Cans.	Total.
	Brought forward ..	80,350	610	80,960
Babbage, E. J. ....	Woodham Ferrers ..	1,500	—	1,500
Davison, G. M. ....	" ..	—	36	36
Gawn, A. W. ....	" ..	600	—	600
Johnson, C. F. ....	" ..	200	—	200
Kidman, E. F. ....	" ..	500	—	500
Rush, W. A. ....	" ..	2,000	—	2,000
Smith, C. M. ....	" ..	250	—	250
Walton, L. J. ....	" ..	200	—	200
White, F. ....	" ..	1,500	—	1,500
Baker, W. R. ....	Writtle ..	500	—	500
Brown, A. J. ....	" ..	2,500	—	2,500
Lowe, F. J. & A. A. ....	" ..	500	—	500
Preston, H. ....	" ..	2,500	—	2,500
Reckitt, Lt.-Col. B. Hughes	" ..	500	—	500
Seabrooke, F. G. ....	" ..	250	—	250
Turrell, W. ....	" ..	300	—	300
Williams, H. M. ....	" ..	1,000	—	1,000
Grand Totals		95,150	646	95,796

## CARBIDE OF CALCIUM.

The following licence was in force during the year :—

Stock .. .. . A. W. Upson.

I am, Gentlemen,

Yours obediently,

A. DENTON OGDEN,

Petroleum Inspector.

Council Offices,

Waterloo Lane, Chelmsford.

May, 1938.

TABLE SHEWING POPULATION AND NUMBER OF HOUSES AT CENSUS 1931,  
AND THE NUMBER OCCUPIED AND UNOCCUPIED AT THE END OF  
DECEMBER, 1937.

	Area in statute acres (land and inland water).	Census, 1931.		Number of houses at end of 1937	
		Houses.	Popula- tion.	Occupied.	Un- occupied.
Baddow, Great .. ..	3910	962	3652	†1372	16
Baddow, Little .. ..	2755	198	751	257	7
Boreham .. .. .	3802	269	1078	308	9
Broomfield .. .. .	1939	433	1310	468	3
Chignal .. .. .	2026	104	350	109	3
Danbury .. .. .	3495	475	1807	643	24
Good Easter .. .. .	1988	103	403	109	—
Hanningfield, East .. ..	2682	117	500	124	3
Hanningfield, South .. ..	4842	72	1071	343	16
Hanningfield, West .. ..	2838	135	521	159	14
Ingatestone and Fryerning ..	4133	620	2352	647	17
Leighs, Great .. .. .	3147	194	728	208	11
Leighs, Little .. .. .	1079	52	158	59	3
Margaretting .. .. .	2284	162	638	181	4
Mashbury .. .. .	898	41	143	41	1
Mountnessing .. .. .	2775	438	749	237	4
Pleshey .. .. .	732	75	272	79	3
Rettendon .. .. .	3709	200	794	246	15
Roxwell .. .. .	4782	194	774	234	8
Runwell .. .. .	2070	190	678	302	34
Sandon .. .. .	2407	150	618	199	6
Springfield .. .. .	1842	116	388	112	2
Stock .. .. .	3555	185	976	320	10
Waltham, Great .. .. .	7452	542	1941	560	20
Waltham, Little .. .. .	2310	190	720	234	7
Woodham Ferrers .. .. .	4756	391	1353	553	30
Writtle .. .. .	8298	831	3111	†896	18
Totals .. .. .	86506	7439	27836	9000	288

†In Great Baddow s.p.a.

1042

†In Writtle s.p.a.

688





